Guidance Store System Vybrané kapitoly z logistiky MS Dynamics NAV

Skorkovský



Tato modifikace prezentace je určena studentům PIS2 na ESF MU



Standard Item Card (could be product or material)

| les & Marketing | General Invoicing Replenishment Planning Foreign Tra | de Item Tracking E - Commerce Warehouse |
|---------------------------------|--|---|
| Sales | No | Search Description C1.2X1210MCTY |
| Order Processing Marketing | Description C1 2¥1210MCTY | Inventory |
| / Inventory & Pricing | | |
| Items | | |
| 📼 Nonstock Items | Bill of Materials | |
| 💷 Sales Price Worksheet | Shelf No | Qty. on Component Lines . |
| Adjust Item Costs/Prices | Automatic Ext. Texts 🔲 | Qty. on Sales Order |
| Reports | Created From Nonstock | Qty. on Service Order 0 |
| | Item Category Code PRODUCTS | Service Item Group |
| | Product Group Code STEEL | Blocked |
| | | Last Date Modified 16.09.09 |
| | | |
| | | |
| | Item | Purchases Functions Nánověda |
| | | |
| | | |
| ↓ | | Ļ |
| | Item PR005372 - P | urchase Prices |
| | | |
| dor No. Vendor Item No. | Lead Tim | |
| 20000_PC_ARCELOR | 2T 🔄 Vendor No. Filter | Item No. Filter PR0053 |
| 20000120000 PC Steel King | 1M | Starting Date Filter |

Vendor No. Item No.

۲

10000 PR005372 1 TN

20000 PR005372... TN

50000 PR005372... TN

Unit of Me... Minimum Qua... Direct Unit Cost Starting D... Ending Date

620,00

541,00

618,00

01.01.08

01.01.08

01.01.08

31.12.08

31.12.08

31.12.08

0,00

0,00

0,00



Purchased Products and Item Ledger Entries (položky zboží)

| General Invoicing Replenishment Planning | Foreign Trade | Item Tracking | E - Commerce | Warehouse | | | |
|--|------------------|---------------|-------------------|-------------|----------|----------|---------------------|
| No | . 🥒 | Search (| Description | C1.2X1210M0 | СТҮ | O | |
| Description | | Inventor | y | | 80 | Quantity | y on hand |
| Base Unit of Measure TN | Ð | Qty. on f | Parch. Order | | | (stav na | skladě- kalkul |
| Bill of Materials | | Qty. on I | Prod. Order | | 0 | • | |
| Shelf No | | Qty. on (| Component Lines . | | 0 | | |
| Automatic Ext. Texts 🛛 . 🛛 🗌 | | Qty. on S | Sales Order | | 0 | | |
| Created From Nonstock | | Qty. on S | Service Order | | 0 | | |
| Item Category Code PRODUCTS | Ð | Service | Item Group | | • | | |
| Product Group Code BTEEL | Ð | Blocked | | | | | |
| | R | Last Dat | e Modified | | 16.09.08 | | |
| | | | | | | | |
| | S <u>a</u> les 🔻 | Purchases | Functions | - Náp | oověda | | |
| | | | | | | | |
| | | | | | | | |
| Postina | Date E D D | ocument Ite | em No. 🛛 Descri | iption | | Lot No. | Location C Quantity |

ované pole)

| | | | | | | | | | (|
|--------------------|---|----------|----------|-------------|---------|------------|----------|----|---|
| Posting Date E | D | Document | Item No. | Description | Lot No. | Location C | Quantity | I | |
| 19.06.08 P | P | 107032 | PR005372 | | ΑΑΑΑΑ | BLUE | | 24 | ^ |
| 19.06.08 P | P | 107032 | PR005372 | | AAAAB | BLUE | | 26 | |
| 19.06.08 P | P | 107032 | PR005372 | | AAAAAC | BLUE | | 15 | |
| 19.06.08 P | P | 107032 | PR005372 | | AAAAD | BLUE | | 15 | |



Kalkulované pole a položky (transakce - pohyby nad kartami)





Kalkulované pole a položky (transakce -pohyby nad kartami)





Nastavení skladu

| 🗰 Nastavení zásob | |
|---|----------|
| Obecné Lokace Dimenze Číslování Automatické účtování Účtování oček.nákladů Automatická adjustace Nikdy ▼ Typ výpočtu prům.poř Zboží ▼ Kopírovat pozn.obj.do ✓ Doba vyskladnění Doba zaskladnění | |
| | Nápověda |

Po registraci (zaúčtování) skladového pohybu se automaticky hodnota zásob zapíše do hlavní knihy (změní se hodnota na relevantních účtech)



Zpráva hodnota zásob a její vytvoření



| Hodnota zásob | | | |
|--|--------|----------|--|
| Zboží Možnosti | | | |
| Pole Číslo Účto skupina zboží Statistická skupina | Filtr | | |
| Tisk Náhled | Storno | Nápověda | |



Standard Item Card (e.g.Consumables)- Inventory Valuation

| | | Bill | Base | As of 31.12.0 | 7 | Increases (L | .cv) | Decreases | ; (LCY) | As of 19.06. | 08 | Cost Posted to |
|---------------|--------------------------------|------|--------|---------------|------------|-----------------|--------------|-----------|--------------|--------------|------------|----------------|
| ltem No. | Description | of M | Unit o | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | G/L |
| | | | | | | | | | | | | |
| Inventory Po: | sting Group: FINISHED | | | | | | | | | | | |
| 1100 | Front Wheel | Ne | PCS | 200 | 25 934,20 | | | | | 200 | 25 934,20 | 25 934,20 |
| 1110 | Rim | Ne | PCS | 400 | 420,00 | | | | | 400 | 420,00 | 420,00 |
| 1150 | Front Hub | Ne | PCS | 200 | 2 488,20 | | | | | 200 | 2 488,20 | 2 488,20 |
| 1200 | Back Wheel | Ne | PCS | 200 | 25 936,30 | | | | | 200 | 25 936,30 | 25 936,30 |
| 1250 | Back Hub | Ne | PCS | 200 | 2 490,30 | | | | | 200 | 2 490,30 | 2 490,30 |
| 1300 | Chain Assy | Ne | PCS | 200 | 2 631,30 | | | | | 200 | 2 631,30 | 2 631,30 |
| 1310 | Chain | Ne | PCS | 100 | 199,00 | | | | | 100 | 199,00 | 199,00 |
| 1700 | Brake | Ne | PCS | 200 | 1 953,00 | | | | | 200 | 1 953,00 | 1 953,00 |
| 1710 | Hand rear wheel Brake | Ne | PCS | 200 | 900,00 | | | | | 200 | 900,00 | 900,00 |
| 9000 | Metal Sheet | Ne | PCS | 0 | 0,00 | 3 000 | 1 051 782,00 | 3 000 | 1 051 782,00 | 0 | 0,00 | 1 051 782,00 |
| 9900 | Metal Sheet | Ne | PCS | 0 | 0,00 | 12 | | | | 12 | 0,00 | 0,00 |
| 100000 | Guaran | Ne | GR | 0 | 0,00 | 100 | 100 000,00 | | | 100 | 100 000,00 | 0,00 |
| 1924-W | CHAMONIX Base Storage Unit | Ano | PCS | 6 | 465,12 | 20 | 1 632,00 | | | 26 | 2 097,12 | 465,12 |
| 1928-W | ST.MORITZ Storage Unit/Drawers | Ano | PCS | 8 | 1 459,20 | 61 | 11 712,00 | 1 | 182,40 | 68 | 12 988,80 | 1 468,80 |
| 1952-W | OSLO Storage Unit/Shelf | Ano | PCS | 4 | 355,68 | 13 _C | 1 216,80 | 1 | 93,60 | 16 | 1 478,88 | 355,68 |
| 1964-W | INNSBRUCK Storage Unit/G.Door | Ano | PCS | 11 | 1 789,04 | 57 | 9 758,40 | 12 | 1 994,48 | 56 | 9 552,96 | 1 848,96 |
| 1968-W | GRENOBLE Whiteboard, red | Ano | PCS | 20 | 13 463,40 | -40 | -28 344,00 | 2 | 1 346,34 | -22 | -16 226,94 | 13 534,26 |
| 1972-W | SAPPORO Whiteboard, black | Ano | PCS | 11 | 7 404,87 | | | | | 11 | 7 404,87 | 7 404,87 |
| 1976-W | INNSBRUCK Storage UnitW.Door | Ano | PCS | 9 | 1 287,63 | | | 5 | 730,41 | 4 | 557,22 | 1 310,22 |
| 1984-W | SARAJEVO Whiteboard, blue | Ano | PCS | 10 | 6 731,70 | | | 10 | 7 086,00 | 0 | -354,30 | 6 731,70 |
| 1988-W | CALGARY Whiteboard, yellow | Ano | PCS | 27 | 18 175,59 | | | 1 | 673,17 | 26 | 17 502,42 | 18 211,02 |
| 1992-W | ALBERTVILLE Whiteboard, green | Ano | PCS | 11 | 7 404,87 | | | 1 | 708,60 | 10 | 6 696,27 | 7 404,87 |
| 766BC-A | CONTOSO Conference System | Ano | PCS | 2 | 6 686,10 | | | 2 | 6 686,10 | 0 | 0,00 | 7 038,00 |
| 766BC-B | CONTOSO Office System | Ano | PCS | 5 | 5 917,55 | | | | | 5 | 5 917,55 | 5 917,55 |
| 766BC-C | CONTOSO Storage System | Ano | PCS | 3 | 1 749,90 | | | 1 | 614,00 | 2 | 1 1 35,90 | 1 749,90 |
| Inventory Po: | sting Group Total: FINISHED | | | | 135 842,95 | | 1 147 757,20 | | 1 071 897,10 | | 211 703,05 | 1 188 175,25 |

Inventory Posting Group: RAW MAT



Základní rovnice

Hodnota skladu = Počáteční saldo hodnoty skladu + Hodnota všech přírůstků-Hodnota všech úbytků

Komplikace : pohyby ve skladech jsou v čase, množstvích a hodnotách různé

a) MS Dynamics NAV vytvoří položky a položky ocenění reprezentující skladové transakce (množství a spojené náklady)

 b) MS Dynamics NAV zaúčtuje hodnotu na relevantní účty hlavní knihy a tyto zápisy jsou vidět nejen na věcných položkách, ale i na modifikovaných položkách zboží a položkách ocenění. Této akci se říkání vyrovnání í s hlavní knihou (reconciliation with G/L)



Hodnota skladu

Určení hodnoty skladu

- V programu Navision se nákupní cena a cena nákladů na zboží dostává do systému (položek zboží a věcných položek) ve dvou fázích :
- a) Kdykoliv se vytvoří položka zboží (nákup,příjem, prodej,výdej) a tyto položky se dostanou do položek zboží a do položek ocenění (přímé a nepřímé náklady, přecenění (revaluation), zaokrouhlení a odchylka)
- b) Následně se musí přenést údaje z položek zboží do hlavní knihy (věcných položek)

Bod b) je řešen dvěma způsoby :

- 1. Dávkovými úlohami Adjustace nákladů-položky zboží a Účtování nákladů na zboží (viz periodické aktivity v oblasti Zásob.
- 2. Zaškrtnutím políčka Automatické účtování nákladů a Účtování očekávaných nákladů v nastavení Zásob - záložka Obecné

Prakticky se se to dá popsat následující rovnicí :

Hodnota skladu = Počáteční hodnota skladu + Hodnota všech přírůstků – Hodnota všech úbytků



Účtování o hodnotě skladu ve dvou fázích



První fáze (registrace množství) Úprava položek ocenění, které ještě nebyly adjustoványvýsledek dávky neovlivňuje hlavní knihu.

Druhá fáze (registrace hodnoty)



Předkontace logistických operací - příklady

| Nákup | 131100 343122 | 321100 | |
|-----------|--------------------|--------------------|--|
| Adjustace | 132100 | 131100 | Nákup, Příjem |
| Prodej | 504 700 501 800 | 132100 132100 | Prodej (spotřeba) Výdej (adjustace) |
| Transfer | 132200 132100 | 132100 132200 | |



Nákupní proces





Nákupní proces



Zásoby k dnešku jsou pod minimem



Dostupnost skladové položky v čase

| M | Možnosti | | | | | | | |
|----|---|--------------|--------------------|-----------------------|-----------------------------------|-------------------------|-----------------------------------|--|
| Fi | Filtr lokace N_CENTRAL Filtr varianty | | | | | | | |
| | Začátek období | Rázev období | Hrubý požadavek | Naplánovaný příjem | Plánovaný příjem objednávky | Předpoklá dost.množ. | Plánovaná vydání objednávky | |
| | 27.12.06 | středa | 0 | 0 | 0 | 0 | 20 | |
| | 28.12.06 | čtvrtek | 0 | 0 | 0 | 0 | 20 | |
| | 29.12.06 | pátek | 0 | 0 | 0 | 0 | 20 | |
| | 30.12.06 | sobota | 0 | 0 | 0 | 0 | 20 | |
| | 31.12.06 | neděle | 0 | 0 | 0 | 0 | 20 | |
| | 01.01.07 | pondělí | 0 | 0 | 0 | 0 | 20 | |
| | 02.01.07 | úterý | 30 | 10 | • 20 | 0 | 20 | |
| | 03.01.07 | středa | 30 | 10 | 20 | 0 | 20 | |
| | 04.01.07 | čtvrtek | 30 | 10 | 20 | 0 | 20 | |



Nákupní proces

| Obecné Fakturace Příjemky Zahraniční obchod Elektronické obchodování Záloha Platby | |
|--|----------|
| Číslo NAK_2006_053 📖 🥒 Zúčtovací datum 02.01.07 | |
| Nákup od dodavatele D00060 🗈 Datum objednávky 02.01.07 | |
| Číslo kontaktu dodavatele . KT000173 💽 Datum dokladu 02.01.07 | |
| Název dodavatele Sanitana Číslo obj.dodavatele | NI/I/ |
| Adresa dodavatele Boženy Němcové 1000 Číslo dodávky dodavatele . | лакирпі |
| Adresa dodavatele 2 . 🙀 | hlavička |
| Dodavatel-PSČ/město CZ-460 01 🔹 Liberec 🔹 Kód adresy objednávky | mavicka |
| Kontakt dodavatele | |
| Počet archivovaných verzí . 0 Centrum odpovědnosti N_CENTRALA 💽 | |
| Stav Otevřeno | |
| | |
| Typ Číslo Popis Kód lokace Rezervova Kód měrné Nákupní | Nákupní |
| Zboží NEXO bidet závěsný bílý N_CENTRAL 10 🔄 💽 3 012,00 | řádlyv |
| | Tauky |







Nákupní proces- po provedeném zaúčtování nákupní objednávky





Dostupnost skladové položky v čase po provedeném částečném nákupu 10 ks

| Mo | Možnosti | | | | | | |
|------|-------------------|----------------|--------------------|-----------------------|-----------------------------------|-------------------------|-----------------------------------|
| Filt | r lokace | Filtr varianty | | • | | | |
| | Te | | | | | | |
| | Začátek období | Název období | Hrubý požadavek | Naplánovaný příjem | Plánovaný příjem objednávky | Předpoklá dost.množ. | Plánovaná vydání objednávky |
| | 24.12.06 | neděle | 0 | 0 | 0 | 10 | 5 |
| | 25.12.06 | pondělí | 0 | 0 | 0 | 10 | 25 |
| | 26.12.06 | úterý | 0 | 0 | 0 | 10 | 25 |
| | 27.12.06 | středa | 0 | 0 | 0 | 10 | 25 |
| | 28.12.06 | čtvrtek | 0 | 0 | 0 | 10 | 25 |
| | 29.12.06 | pátek | 0 | 0 | 0 | 10 | 25 |
| | 30.12.06 | sobota | 0 | 0 | 0 | 10 | 25 |
| | 31.12.06 | neděle | 0 | 0 | 0 | 10 | 25 |
| • | 01.01.07 | pondělí | 0 | 0 | 0 | 10 | ▶ 25 |
| | 02.01.07 | úterý | 30 | 0 | 20 | 0 | 25 |
| | 03.01.07 | středa | 30 | 0 | 20 | 0 | 25 |



Creation of the new Item Card

| General Invoicing Replenishment Planning Fo | Foreign Trade 🛛 Item Tracking | B - Commerce | Warehouse | |
|---|-------------------------------|-----------------|-----------|----------|
| No WK_CONSUM | ✓ Search | Description | . STRAP | |
| Description Strap | Invento | ry | | 0 |
| Base Unit of Measure KG | Qty. or | Purch. Order | | 0 |
| Bill of Materials | Qty. or | Prod. Order | | 0 |
| Shelf No | Qty. or | Component Lines | | 0 |
| Automatic Ext. Texts 🔲 | Qty. or | Sales Order | | 0 |
| Created From Nonstock | Qty. or | Service Order | | 0 |
| Item Category Code CONSUM | Service | Item Group | | • |
| Product Group Code | Blocked | 1 | . 🗖 | |
| | Last Da | ite Modified | | 17.09.08 |

- a) vyberte si karu již vytvořenou
- b) Úpravy->Vybrat ->Ctrl-C (uložení do paměti)
- c) F3->Ctrl- V a následně přepsat číslo na zcela nové číslo
- d) dodat Základní měrnou jednotku a upravit na nulou všechny ceny na záložce Fakturace



Unit Price.

Creation of the new Item Card

0,00

| General Invoicing Replenishment Planning Foreign Tr | rade Item Tracking E - Commerce Warehouse |
|---|---|
| | Gen. Prod. Posting Group . RETAIL 主 |
| Cost is Adjusted 🗹 | VAT Prod. Posting Group . VAT25 💽 |
| Cost is Posted to G/L 🗹 | Inventory Posting Group RAW MAT 💽 |
| | Net Invoiced Qty 0 |
| Overhead Rate | Allow Invoice Disc 🗹 |
| Indirect Cost % 0 | Item Disc. Group |
| Last Direct Cost | Sales Unit of Measure KG 💽 |
| Price/Profit Calculation Profit=Price-Cost 💌 | |
| Profit % 0 | |



Creation of the new Item Card

| General Invoicing Reple | enishment | Planning | Foreign Trade | Item Tracking | E - Commerce | Warehouse | |
|--------------------------|-----------|----------|---------------|---------------|--------------|---------------|-------|
| Replenishment System | Purchase | • | | Production | | | |
| Purchase | | | | Manufact | uring Policy | . Make-to-Sto | ick 💌 |
| Vendor No | | 60000 | F | Routing N | lo | | • |
| Vendor Item No | | | | Productio | n BOM No | | • |
| Purch. Unit of Measure . | . ROLL | C | Đ | Rounding | Precision | | 1 |
| Lead Time Calculation | | t | T | Flushing | Method | . Manual | - |
| | | | | Scrap % | | | 0 |
| | | | | Lot Size | | | 0 |

| General Invoicing Replenishment P | Planning Foreign Trade | Item Tracking | E - Commerce | Warehouse | |
|-----------------------------------|------------------------|---------------|------------------|-----------|-----|
| Reordering Policy | | Reorder | Cycle | | 2T |
| Include Inventory 🗹 | | Safety Le | ad Time | | |
| Reserve Optional | | Safety St | ock Quantity | | 100 |
| Order Tracking Policy None | | Reorder | Point | | 0 |
| Stockkeeping Unit Exists 🗌 | | Reorder | Quantity | | 0 |
| Critical 🔲 | | Maximun | n Inventory | | 0 |
| | | Minimum | Order Quantity | | 0 |
| | | Maximun | n Order Quantity | | 0 |
| | | Order Mu | ultiple | | 0 |
| | | | | | |



Item Card and Entries (Item Ledger and Value Entries) položky zboží a položky ocenění





Stock Availability

- Reasons for reordering (replenishment)
 - Sales Order (CR)
 - Production Order
 - Transfer Order
 - Both of above





Stock (Item) Availability by Period

Sales Order Header

| | T No. | Description | Location C | Quantity | Reserved | Unit of I | Me Unit Pr | ice Line Ar | mount E Lir | Item Inf | formation — | | |
|-----|-------------------|--------------|------------|-------------|----------|-----------|-------------------|----------------------|-----------------------------|-----------------------------------|------------------------------|-----|------------------|
| • | I WK_CO | NS Strap | BLUE | 400 | | + | | | | - Ite <u>m</u> C | Card | | Ø |
| | | Coloc Lino | | | | | | | | - Availa | bility | (-4 | 1 00) |
| | | Sales Line | | т | | | | | | • Substi | tutio <u>n</u> s | | (0) |
| | | | | 1 | | | | | | • <u>S</u> ales | Prices | | (0) |
| | | | | | | _ | | | | • Sales | Line <u>D</u> is | | (0) |
| Opt | tions | | | | 7 | , | | | | | | | |
| Loc | ation Filter | BLUE | | Variant Fil | ter | . " | | • | | | | | |
| | Začátek období | Název období | | | | | Gross Requirem | Scheduled Receipt | Planned Order Receipt | Projected Available Balance | Planned Order Releases | | |
| • | 16.06.0 | 3 pondělí | | | | | . 0 | . 0 | . 0 | 0 | ÷ | 0 | ~ |
| | 17.06.0 | 3 úterý | | | | | 0 | 0 | 0 | 0 | | 0 | |
| | 18.06.0 | 3 středa | | | | | 0 | 0 | 0 | 0 | | 0 | |
| | 19.06.0 | 3 čtvrtek | | | | | 400 | 0 | 0 | -400 | | 0 | |
| | 20.06.0 | 3 pátek | | | | | 0 | 0 | 0 | -400 | | 0 | |
| | 21.06.0 | sobota | | | | | 0 | 0 | 0 | -400 | | 0 | |
| | 22.06.0 | neuele | | | | | U | U | U | -400 | | U | |



Suggested replenishment using standard Requisition Work Sheet (Sešit požadavků)





Stock (Item) Availability by Period

| Op | tions | | | | | | | | | |
|----|---------------------------------------|--------------|-----------|--|--|-----------------------------|-----------------------------------|------------------------------|------|--|
| Lo | Location Filter BLUE 🔹 Variant Filter | | | | | | | | | |
| | | | | | | | Kequisti | Purchase) | Line | |
| | Začátek období | Název období | Sales Lin | e (Gross Requi Gross Requirem | rement) Scheduled Receipt | Planned Order Receipt | Projected Available Balance | Planned Order Releases | | |
| | 09.06.08 | 24 | | 0 | 0 | 0 | 0 | 400 | ^ | |
| | 16.06.08 | 25 | | 400 | 0 | 0 | -400 | 400 | - | |
| | 23.06.08 | 26 | | 400 | - 0 | 0 | -400 | 400 | | |
| | 30.06.08 | 27 | | 400 | 0 | 0 | -400 | 400 | | |



Stock (Item) Availability by Period (after partial Purchase Order is issued)

| Options | | | | | | |
|--------------------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---|------------------------------|
| Location Filter BLUE | Variant Filter | • | | | | |
| Začátek období Název období | | Gross Requirem. | Scheduled | Planned Order Receipt | Projected Available Balance | Planned Order Releases |
| 30,06,08 27 | | 4 | UU <u>24</u> 00 24 | 10 (| U -16U | 0 |
| 14.07.08 29 | and after RQWSHT started ag | ain 🕴 | 00 24 | 10 (| 0 -160 | 0 |
| Ontions | | | | | | |
| | | | | | | |
| Location Filter BLUE | ● Variant Filter | 1 | | | | |
| Začátek období Název období | | Gross Requirem | Scheduled Receipt | Planned Order Receipt | Projected F Available C Balance F | Planned Order Releases |
| 19.05.08 21 | | 0 | 0 | 0 | 0 | 0 |
| 26.05.08 22 | | 0 | 0 | 0 | 0 | 0 |
| 02.00.08 23 | | U | U | U | U | 0 |
| 09.06.08 24 | | 0 | 11 | | | 160 |
| 09.06.08 24 16.06.08 25 | | 400 | 240 | 160 | 0 | 160 160 |



Stock (Item) Availability by Period (after another partial Purchase Order has been booked)

| Op | Options | | | | | | | | | | |
|-----|---|--------------|-------------------|----------------------|-----------------------------|-----------------------------------|------------------------------|--|--|--|--|
| Loc | Location Filter BLUE 🔹 Variant Filter " | | | | | | | | | | |
| | | | | | | | | | | | |
| | Začátek období | Název období | Gross Requirem | Scheduled Receipt | Planned Order Receipt | Projected Available Balance | Planned Order Releases | | | | |
| | 23.06.08 | pondělí | 400 | 240 | 160 | 80 | 160 | | | | |
| | 24.06.08 | úterý | 400 | 240 | 160 | 80 | 160 | | | | |
| | 25.06.08 | středa | 400 | 240 | 160 | 80 | 160 | | | | |
| | 26.06.08 | čtvrtek | 400 | 240 | 160 | 80 | 160 | | | | |
| | 27.06.08 | pátek | 400 | 240 | 160 | 80 | 160 | | | | |
| | 28.06.08 | sobota | 400 | 240 | 160 | 80 | 160 | | | | |
| | 29.06.08 | neděle | 400 | 240 | 160 | 80 | 160 | | | | |
| | 30.06.08 | pondělí | 40 | 2 🕇 320 | 160 | 160 | 160 | | | | |
| | 01.07.08 | úterý | 400 | 320 | 160 | 160 | 160 | | | | |

What we have at our disposal at the given point of time. This goes beyond the quantity on hand and includes such a factors as allocations, meaning quantities, that have been already put aside or reserved for specific purposes



Stock (Item) by Location (after another partial Purchase Order has been booked)

| Op | Options | | | | | | | | | | | |
|----|-----------------------|--------------------------------|--|------|-------|-----|--------|-------|--|--|--|--|
| Sh | Show Items in Transit | | | | | | | | | | | |
| Sh | Show Column Name | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | No. | Description | | BLUE | GREEN | RED | SILVER | WHITE | | | | |
| • | WK_CONS | Strap | | 80 | 0 | 80 | 0 | 0 🔨 | | | | |
| | 1896-S | ATHENS Desk | | 0 | 49 | 20 | - 0 | 0 | | | | |
| | 1900-S | PARIS Guest Chair, black | | 52 | 41 | 46 | 0 | 0 | | | | |
| | 1906-S | ATHENS Mobile Pedestal | | 70 | 88 | 56 | 0 | 0 | | | | |
| | 1908-S | LONDON Swivel Chair, blue | | 234 | 57 | 14 | 0 | 0 | | | | |
| | 1920-S | ANTWERP Conference Table | | 38 | 65 | 3 | 0 | O | | | | |
| | 1924-W | CHAMONIX Base Storage Unit | | 1 | 8 | 2 | 0 | O | | | | |
| | 1928-S | AMSTERDAM Lamp | | 149 | -19 | 55 | 0 | O | | | | |
| | 1928-W | ST.MORITZ Storage Unit/Drawers | | 4 | 23 | -1 | 0 | O | | | | |
| | 1936-S | BERLIN Guest Chair, yellow | | 36 | 46 | 50 | 0 | O | | | | |
| | 1952-W | OSLO Storage Unit/Shelf | | 9 | -1 | 7 | 0 | O | | | | |
| | 1960-S | ROME Guest Chair, green | | 153 | 0 | 24 | 0 | 0 | | | | |
| | 1964-S | TOKYO Guest Chair, blue | | 59 | 60 | 29 | 0 | 0 | | | | |



Stock (Item) Availability by Location

| | 🎟 WK_CONSUM_001 Strap - Item Availability by Location | | | | | | | | | | | |
|---|---|------------------|----------------------|----------------------|--------------------|-----------------------------------|-----------|----------------------------|------------------------|-----------------------|------------------------------|---|
| ٢ | Options | | | | | | | | | | | |
| L | Date Filter | 01.06.0830.06.08 | Variant | Filter | | • | 0 | | | | | |
| | Code | Name | Gross Requirement | Scheduled Receipt | Planned Receipt | Projected Available Balance | Inventory | Qty. on Purch. Order | Qty. on Sales Order | Expected Inventory | Planned Order Releases | |
| | BLUE | Blue Warehouse | 400 | 🛃 0 | 0 | -320 | 80 | 0 | 400 | -320 | 320 | ^ |
| | GREEN | Green Warehouse | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | RED | Red Warehouse | 111 | 0 | 0 | -31 | 80 | 0 | 111 | -31 | 31 | |
| | SILVER | Silver Warehouse | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | WHITE | White Warehouse | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | YELLOW | Yellow Warehouse | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | | | | , | 5 | | | | | | |
| | | | | | | | | | | | | ~ |
| | 1 7 31 3 12 ፤ I··I ···I ◀► Help | | | | | | | | | | | |



Stock Reservation (from Sales Order Line)



Reservation form after partial action was taken

| Gen | eral Filters | | | | | | |
|------|----------------------|---------------------|----|----------|------------|------------|-----------|
| Iten | n No | Quantity to Reserve | | | 400 | | |
| Ship | oment Date | Reserved Quantity | | | 240 | | |
| Des | cription | Unreserved Quantity | | | 160 | | |
| | | | | | | | |
| | Summary Type | Total Qua. | Тс | otal Res | Qty. Alloc | Total Avai | Current R |
| | Item Ledger Entry | 8 | 30 | | | 80 | |
| ► | Purchase Line, Order | 24 | ŧO | 240 | | | 240 |
| | | | | | - | | |



Stock Reservation (from Sales Order Line)





Stock Reordering Policy

 Once the program has detected the need for replenishment, it uses reordering policy to calculate the lot size per planning period, which you define in Reorder Cycle Field. Depending of chosen value in Reordering policy field your replenishment rules for calculation is driven by Order Modifiers and other fields on right hand side of the form (Safety Stock, Maximum, Reorder Point,..)

| WK_CONSUM_001 Strap - Item Card | | | | | | | | | |
|--|--------------------------------------|--|--|--|--|--|--|--|--|
| General Invoicing Replenishment Planning Foreign Trade | Item Tracking E - Commerce Warehouse | | | | | | | | |
| Reordering Policy 📑 ixed Reorder Qty 🔽 | Reorder Cycle | | | | | | | | |
| Include Inventory | Safety Lead Time | | | | | | | | |
| Reserve Optional 💽 | Safety Stock Quantity 100 | | | | | | | | |
| Order Tracking Policy None | Reorder Point | | | | | | | | |
| Stockkeeping Unit Exists | Reorder Quantity | | | | | | | | |
| Critical | Maximum Inventory 0 | | | | | | | | |
| Fixed Reorder Quantity | Minimum Order Quantity . | | | | | | | | |
| Order | Maximum Order Quantity0 | | | | | | | | |
| Order | Order Multiple 0 | | | | | | | | |
| Maximum Quantity | | | | | | | | | |
| Lot-for-Lot Order modifiers | | | | | | | | | |
| | | | | | | | | | |
| <u>I</u> tem ▼ S <u>a</u> les ▼ | Purchases V Functions V Nápověda | | | | | | | | |



Stock Reordering Policy – Fixed Reorder Quantity

• The program uses the quantity specified in Reorder Quantity filed as the standard lot size. Notwithstanding, the program may adjust this quantity to meet additional requirements of the specific inventory level. In this case program disables Maximum Qty field.

In this example we are using 2 Stock Locations (Bays): Red and Blue

| Gross Requirement | Reorder Quantity (RQ) | Safety Stock Quantity (SSQ) | Reorder Point (RP) | Projected Available Balance (Stock in Hand) | Calculated Quantity |
|----------------------|--------------------------|--------------------------------|-----------------------|---|-------------------------|
| 400 | 400 | 500 | 600 | 80 Blue + 80 Red | 320 Blue + 500 + 400 |
| 400 | 400 | 0 | 0 | 80 Blue + 80 Red | 320 Blue + 400 |
| 400 | 400 | 500 | 0 | 80 Blue + 80 <mark>Red</mark> | 320 Blue + 500 |
| | | • | | × | 1 |

IF SSQ<RQ-> 320+400

80 + 320 = 400



Stock Reordering Policy – Maximum Quantity

• The program uses the quantity specified in Maximum Quantity to determine the maximum lot size. The program may adjust this quantity to meet additional requirements of the specific inventory level. If this option is selected, than Reorder Quantity field is disabled (it is use only with Fixed Reorder Quantity option.

In this example we are using 2 Stock Locations (Bays): Red and Blue

| Gross Requirement | Maximum Quantity (MQ) | Safety Stock Quantity (SSQ) | Reorder Point (RP) | Projected Available Balance (Stock in Hand) | Calculated Quantity |
|----------------------|--------------------------|--------------------------------|-----------------------|---|--------------------------------|
| 400 | 300 | 300 | 0 | 80 Blue + 80 Red | 320 Blue + 300 + 300 |
| 400 | 400 | 0 | 0 | 80 Blue + 80 Red | 320 Blue |
| 400 | 330 | 222 | 0 | 80 Blue + 80 Red | 320 Blue + 552 |
| 400 | 330 | 340 | 0 | 80 Blue + 80 <mark>Red</mark> | 320 Blue + 340 |

Note that for optimal results, you should set up this field so that **maximum inventory**><u>reorder point</u>>safety stock.



Stock Reordering Policy – Maximum Quantity



Note that depending on the current inventory at the time, this may result in order proposal quantities that cause the projected available balance to exceed the maximum inventory that you define



Stock Reordering Policy – Lot-for-Lot

The program generates an order proposal with a quantity that meets the sum of the requirements that come due within the reorder cycle. If you select this option, the program disables the **Reorder Quantity** field, which is used exclusively with the Fixed Reorder Qty. option, the **Maximum Inventory field**, which is used exclusively with the Maximum Qty. option, and the <u>Reorder Point</u> field. Using the reorder point with Lot-for-Lot could result in additional (surplus) replenishment order proposals.

| Gross Requirement 19.6.2008 (BLUE) | Gross Requirement 29.6.2008 (RED) | Safety Stock Quantity (SSQ) | Reorder Cycle | Projected Available Balance (Stock in Hand) | Calculated Quantity | | | | |
|--|---|--------------------------------|---------------|---|----------------------------|--|--|--|--|
| 400 | 111 | 200 | 1M | 80 Blue + 80 Red | 320 Blue + 200 + 31 Red | | | | |
| In this example we are using 2 Stock Locations (Bays): Red and Blue | | | | | | | | | |

Where 111 = 80 + 31 for Red location



Use of forecast for planning replenishment





Net Requirement; Gross Requirement- definitions

- Some helps refer for calculation : firstly calculate availability and then Net Requirement
- Comments : i = period, GR- Gross Requirement, NR= Net Requirement, SS- Safety Stock, PO=Purchase Order, SO – Sales Order
- Definition 1 : Stock[i] = Expected stock [i] = Stock calculated for the last date of the previous period + Quantity of already generated PO – Quantity of already generated SO - SS
- Simplified definition : Stock[i+1] = Stock[i] + Expected receipt Expected delivery – SS
- **GR=NR** + Stock[i+1] , **Stock availability**
- NR = GR Stock[i+1] = GR- Stock[i] receipts + deliveries + SSZ



Order Promising

- ATP based on the inventory reservation system performing the availability check (calculation of the date of delivery)
- CTP based on WHAT IF scenarios. Earliest date that item will be available
 If no items that can be available, no inbound orders- purchase, transfer,
 return, production it calculates Earliest date, create Order lines and reserve
 inventory. May be integrated to the production scheduling, transfer and
 purchase



Order Promising II



Entered manually to affect calculation if RDD is not entered

RDD is entered manually if required by customer and it affects the calculation



Order Promising III



is realistic, taking into account inventory availability (using backward calculation)



Scenario I







Scenario II-1

Sales Order Header

Sales Order Line

On must be carefully setup up :

Check Available period Calculation and Check Available Time Bucket

(in Company setting)

Location Green, PART001 – 30 pc

Another possibility to get help in guess of availability is use of **CTP** =Capable-To-Promise

General Filters The quantity on inventory is not sufficient to cover the net change in inventory. Do you still want to record the guantity? **PART001** TEST Description Inventory. 11 30 Gross Requirement . . . Scheduled Receipt. . . . Current Quantity 30 -19 Total Quantity Earliest Availability Date . 18.07.05 Substitutes Exist Form 342



Scenario II-2

| T 📾 | EST Test - | ltem Availability by F | Periods | | | | | |
|-----|-----------------|------------------------|-------------------|-----------|-----------------------------|--------------------------------|------------------------------|--------|
| Op | tions | | | | | | | |
| Lo | cation Filter . | ZELENÝ | ١ | | Variant Filt | er " | | ٠ |
| | Period Start | Period Name | Gross Require) | Scheduled | Planned Order Receipt | Projected Available Balance | Planned Order Releases | |
| | 11.12.00 | 50 | 0 | 0 | \star 0 | 11 | 0 | ^ |
| | 18.12.00 | 51 | 0 | 0 | 0 | 11 | 0 | |
| | 25.12.00 | 52 | 0 | 0 | 0 | 11 | 0 | ≡ |
| | 01.01.01 | 1 | 0 | 0 | 0 | 11 | 0 | |
| | 08.01.01 | 2 | 0 | 0 | 0 | 11 | 0 | _ |
| | 15.01.01 | 3 | 0 | 0 | 0 | 11 | 0 | |
| | 22.01.01 | 4 | 30 | 0 | 0 | -19 | 0 | |
| | 29.01.01 | 5 | 0 | 30 | 0 | 11 | 0 | |
| | 05.02.01 | 6 | 0 | 30 | 0 | 41 | 0 | |
| | 12.02.01 | 7 | 0 | 40 | 0 | 81 | 0 | |
| | 19.02.01 | 8 | 0 | 0 | 0 | 81 | 0 | |
| | 26.02.01 | 9 | 0 | 0 | 0 | 81 | 0 | |
| | 05.03.01 | 10 | 0 | 0 | 0 | 81 | 0 | |
| | 12.03.01 | 11 | 0 | 0 | 0 | 81 | 0 | ~ |
| 1 | 7 31 3 | 12 🗄 ⊡ …I | | к | Cancel | Item 🔻 |) Help | • • |



Scenario III-1

General Filters

The quantity on inventory is not sufficient to cover the net change in inventory. Do you still want to record the quantity?

| Posting Date | 30.09.08 | |
|--------------------------|----------|--|
| Order Date | 30.09.08 | |
| Document Date | 30.09.08 | |
| Requested Delivery Date | | |
| Promised Delivery Date . | | |

| No PART_001 |
|------------------------------|
| Description Part_001 |
| Inventory |
| Gross Requirement 0 |
| Scheduled Receipt 0 |
| Current Quantity 200 |
| Total Quantity200 |
| Earliest Availability Date . |
| Substitutes Exist |

| | т | S No. | ales Line | Quantity | Unit of Measure Code | Qty. to Ship | Qty. to Invoice | Requested Delivery Date | Promised Delivery Date | Planned Delivery Date | Planned Shipment Date | Shipment Date | Shipping Time | Outbound Whse. Handling Time |
|---|---|----------|-----------|----------|----------------------------|-----------------|--------------------|-------------------------------|------------------------------|-----------------------------|-----------------------------|------------------|------------------|---------------------------------------|
| ► | I | PART_001 | Part_001 | 200 | (G) | 200 | 200 | | | 02.10.08 | 02.10.08 | 30.09.08 | | 2D |



Scenario III-3

| | Internation | nal Ltd Microsoft | Dynamics N | AV - [Sales Order - | Order Prom | nising Lines] |] | | | | | | | | | 1 |
|-------------|-------------|-------------------|------------|---------------------|------------|---------------|-----|-------------------------------|-------------------------------|-----------------------------|------------------------------|------------------------------|----------|-------------------------|----------------------------|---|
| 📰 File Edit | View Tools | Window Help | | | | | | | | | | | | | - | ć |
| 1 | Х 🖻 | 🔒 I | × 🔎 | 🗊 🗃 🗃 🗊 | 1 €} (| 000 | | | 🖉 🛃 · | | | | | | 4 | (|
| Sal | No | | 1006 | Bef | ore Cl | TP calo | cul | atio | า | | | | | | | |
| | Item No. | Description | | | | | | Requested Delivery Date | Requested Shipment Date | Planned Delivery Date | Original Shipment Date | Earliest Shipment Date | Quantity | Unavailable Quantity | Unit of Measure Code | |
| | PART_001 | l Part_001 | | | N | | | | 30.09.08 | | 30.09.08 | 3 | 200 | 200 | KG | |
| | | | | | | | | | | | | | | | | |
| | Item No. | Description | Afte | r CTP calo | culatio | on 🗸 | 7 | Requested Delivery Date | Requested Shipment Date | Planned Delivery Date | Original Shipment Date | Earliest Shipment Date | Quantity | Unavailable Quantity | Unit of Measure Code | |
| | PART_001 | Part_001 | | | | | | 2 | 30.09.08 | 13.10.08 | 30.09.08 | 11.10.08 | 200 | 200 | KG | Ī |
| | | | | | | | | . 0 | | | | | | | | |



Scenario III-4 — Requested Delivery date entered manually



| [Sales Order - Order Promising Lines] | Requested | Requested Shipment | Planned Delivery | Original Shipment | Earliest Shipment | | Unavailable | | | |
|--|-----------|-----------------------|---------------------|----------------------|----------------------|----------|-------------|--|--|--|
| Item No. Description | Date | Date | Date | Date | Date | Quantity | Quantity | | | |
| PART_001 Part_001 | 06.10.08 | 04.10.08 | | 04.10.08 | | 200 |) 200 | | | |
| After CTP calculation Requested Planned Original Earliest Unavailable Item No. Description Date Date Date Original Shipment Date Date Original Shipment Date Dat | | | | | | | | | | |
| PARI_001 Part_001 | 06.10.08 | 04.10.08 | 13.10.08 | 04.10.08 | 11.10.08 | 200 | 200 | | | |
| Sales Line when accented | | | | | | | | | | |

| No. | Description | Quantity | Unit of Measure Code | Qty. to Ship | Qty. to Invoice | Requested Delivery Date | Promised Delivery Date | Planned Delivery Date | Planned Shipment Date | Shipment Date |
|----------|-------------|----------|----------------------------|-----------------|--------------------|-------------------------------|------------------------------|-----------------------------|-----------------------------|------------------|
| PART_001 | Part_001 | 200 | (G) | 200 | 200 | 06.10.08 | | 13.10.08 | 13.10.08 | 11.10.08 |
| | | | | | | | | | | |

PART is reserved

Request Worksheet is created is CTP accepted

| | | А., | | | | | | | | | R | |
|----------|-----|-----|----------|----------|--------------------|------------------|-------------|----------|-----|----------|-----|------------|
| | Α., | Α., | Original | | | | | Original | M., | | O., | Ref. Order |
| No. | М., | Μ. | Due Date | Due Date | Starting Date-Time | Ending Date-Time | Description | Quantity | 0 | Quantity | Т., | No. |
| PART_001 | N., | ~ | | 11.10.08 | 01.10.08 00:00 | 08.10.08 23:59 | Part_001 | | | 200 | Ρ | 101082 🚹 |



Scenario III-5

🍐 CRONUS International Ltd. - Microsoft Dynamics NAV - [PART_001 Part_001 - Item Availability by Periods]

| Period Start | Period Name | Gross Require | Scheduled Receipt | Planned Order Receipt | Projected Available Balance | Planned Order Releases |
|-----------------|-------------|------------------|----------------------|-----------------------------|-----------------------------------|------------------------------|
| 10.10.08 | Friday | 0 | 0 | 0 | 0 | 0 |
| 11.10.08 | Saturday | 200 | 200 | 0 | 0 | 0 |
| 12.10.08 | Sunday | 0 | 0 | 0 | 0 | 0 |
| 13.10.08 | Monday | 0 | 0 | 0 | 0 | 0 |
| 14.10.08 | Tuesday | 0 | 0 | 0 | 0 | 0 |
| 15.10.08 | Wednesday | 0 | 0 | 0 | 0 | 0 |
| 16.10.08 | Thursday | 0 | 0 | 0 | 0 | 0 |

Request Worksheet to replenish PROD_001 is created ->Purchase Order is created

🕼 CRONUS International Ltd. - Microsoft Dynamics NAV - [DEFAULT Default Journal Batch - Req. Worksheet]

| N | ame | | DEFAI | JLT (| Đ | | | | | | | | |
|---|--------|-------|--------|----------|--------------------|----------|----------|----------|-----------|----------|----------|----------|------------|
| | T P | No. | Action | Accept A | Description | Location | Original | Quantity | Unit of M | Direct U | Original | Due Date | Vendor No. |
| Г | 🕨 (ter | OD_01 | New | ~ | Parent Coil Test 1 | | | 4 000 | KG | 0,00 | | 01.10.08 | 10000 |



Scenario III-6 – PC purchased and 50 % of production registered

A CRONUS International Ltd. - Microsoft Dynamics NAV - [PART_001 Part_001 - Item Availability by Periods]

| Period Start | Period Name | Gross Require | Scheduled Receipt | Planned Order Receipt | Projected Available Balance | Planned Order Releases |
|-----------------|-------------|------------------|----------------------|-----------------------------|-----------------------------------|------------------------------|
| 25.08.08 | 35 | 0 | 0 | 🛃 0 | 100 | 0 |
| 01.09.08 | 36 | 0 | 0 | 0 | 100 | 0 |
| 08.09.08 | 37 | 0 | 0 | 0 | 100 | 0 |
| 15.09.08 | 38 | 0 | 0 | 0 | 100 | 0 |
| 22.09.08 | 39 | 0 | 0 | 0 | 100 | 0 |
| 29.09.08 | 40 | 0 | 0 | 0 | 100 | 0 |
| 06.10.08 | 41 | 200 | 100 | 0 | 0 | 0 |
| 13.10.08 | 42 | 200 | 100 | 0 | 0 | 0 |
| 20.10.08 | 43 | 200 | 100 | 0 | 0 | 0 |

After some stock transfers- bin in standard will be changed and modified to GRID

🏄 CRONUS International Ltd. - Microsoft Dynamics NAV - [Item PART_001 Part_001 - Item Ledger Entries]

| Posting Date | Е Т | D T | Document No. | Item No. | Description | Location Code | Quantity |
|-----------------|--------|--------|-----------------|----------|-------------|---------------|----------|
| 30.09.08 | т | | T01001 | PART_001 | | WEST WORK 🚺 | 20 |
| 30.09.08 | т | | T01002 | PART_001 | | WEST WORK | 40 |
| 30.09.08 | т | | T01003 | PART_001 | | WEST WORK | 40 |

| Bin Code | Fixed | Default | Item No. | Quantity |
|------------|-------|---------|----------|----------|
| A21N 🕇 | ~ | ~ | PART_001 | 60 |
| B325 | ~ | | PART_001 | 40 |



