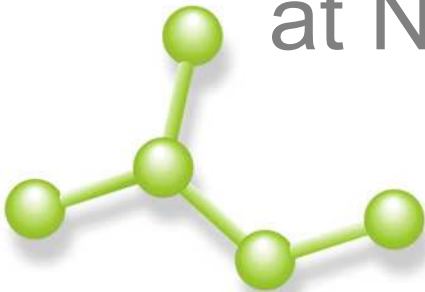




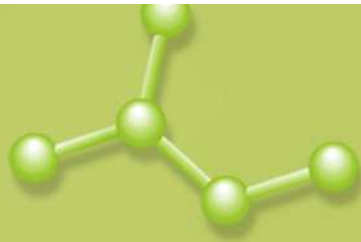
Quest

Configured Item Manufacturing at Neumann Steel



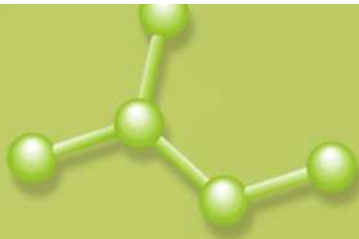
Quest
Australia & New Zealand Users Group





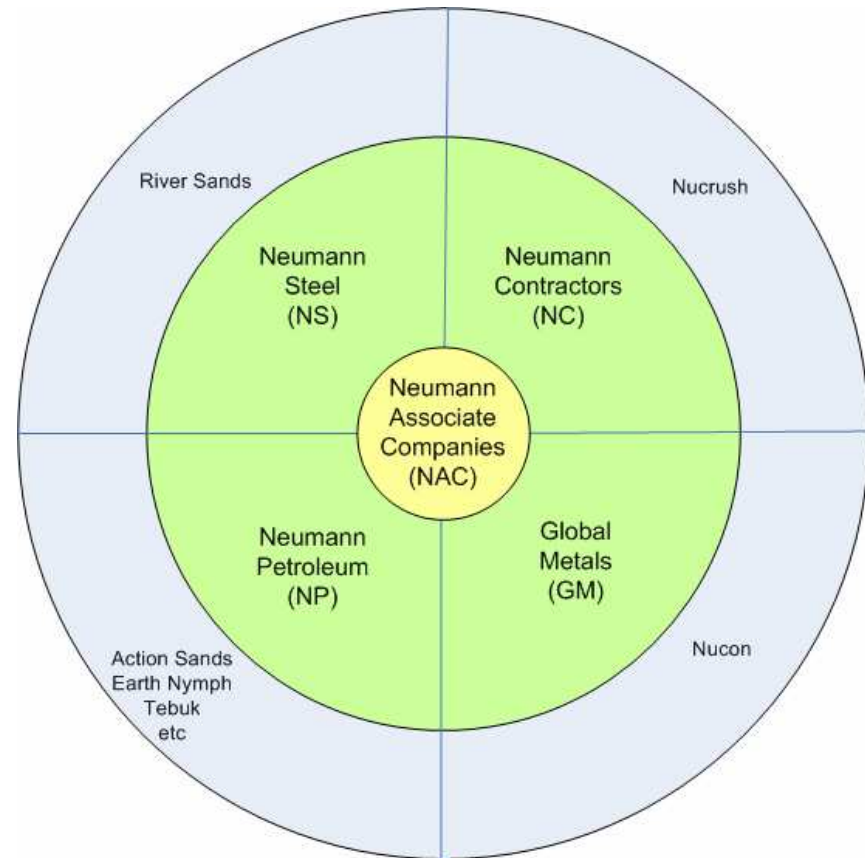
Agenda

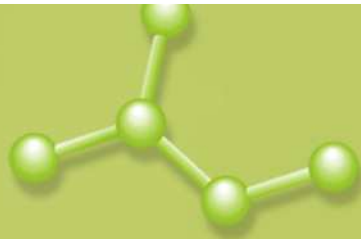
- Introduction
- Configurator - they why and the how
- Manufacturing configured items



Neumann Group Summary

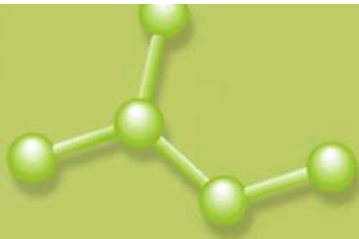
- The Neumann Group of Companies is family owned and operated and has been in existence since 1948
- The group has diversified over the years and now trades in various industries such as steel, specialised metals, civil construction and petroleum
- Neumann's turnover is in excess of \$800M and the group currently employs over 1200 people Australia wide
- Neumann Associate Companies provides the strategic direction and framework for the group
- Head office is located at Currumbin, South East Queensland





Neumann Steel Summary

- The Neumann Steel business is among the newest members to the Neumann Group of Companies. It was established in 1985 after the owners undertook a tour of European mesh plants and decided to commence manufacturing of steel reinforcing products. It remains operating at its existing site at the Neumann Group complex in Currumbin, Queensland.
- Neumann Steel is the largest privately owned concrete reinforcement manufacturer in Queensland. They have been involved in many major projects on the Gold Coast, such as the Paradise Centre and, more recently, the Q1 tower, Circle on Cavill, and Avalon. Current projects include Southport Central and the Southern Regional Water Pipeline. Neumann Steel have Service Centres in nine locations throughout South East Queensland and New South Wales. All Service Centres stock a wide range of builders and concreter's products.



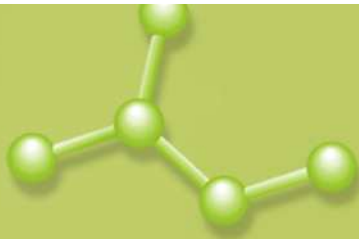
Neumann Steel JDE Environment

- **General**

- Implementation went live in April 2006
- Approximately 130 concurrent users
- Modules in use
 - Financials :- GL, AR, AP and FA
 - Distribution :- Inventory, Sales Orders, Adv Pricing, Configurator and Transportation
 - Discrete Manufacturing :- Make to stock and make to order
 - Procurement
 - Asset Management :- Plant maintenance
 - Workforce Management :- Employee and time and labour capture

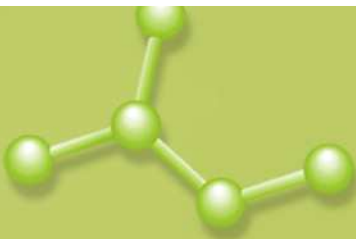
- **Technical**

- JD Edwards EnterpriseOne 8.10 Update 2 on Windows 2003 SP1 with VMWare ESX
- Oracle 9i on Windows 2003 SP1
- Windows Fat Client over Citrix Metaframe

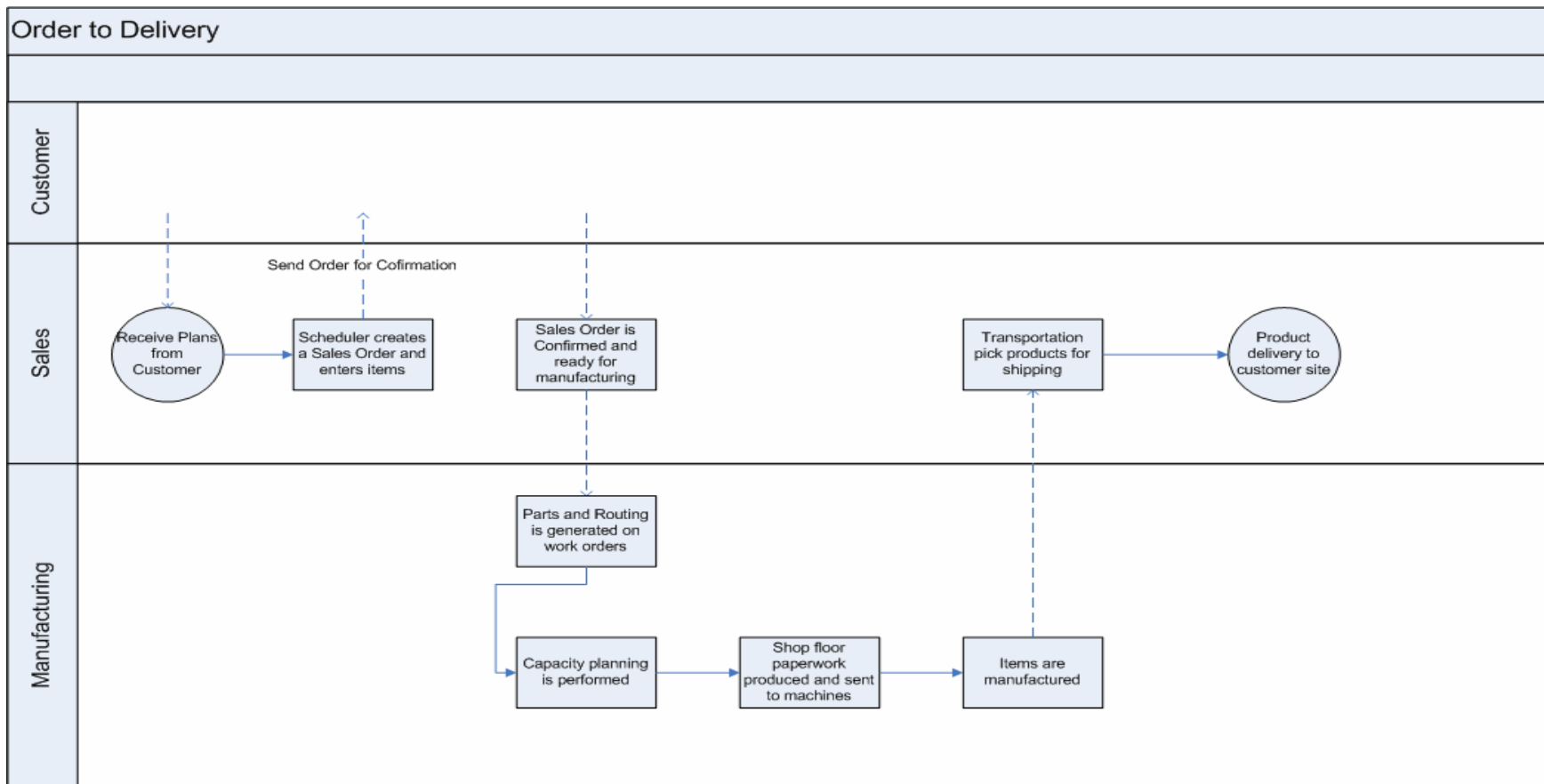


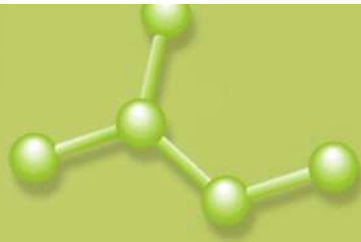
Configurator – why?

- Steel reinforcing, especially reinforcing bar, is required to be manufactured to a customer's specifications and therefore a standard manufactured item would not suffice.
- Configurator allows all of the variables and dimensions to be entered at the point of entering the sales order. This information determines the item price as well as the manufacturing routing and bill of material
- Allows manufacturing specific information to be calculated and stored in JDE
- Gives the support guys something to do



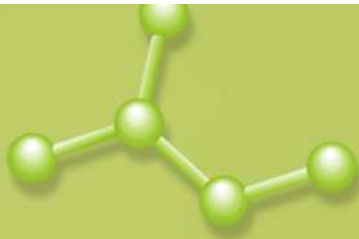
Order to Delivery – The Process





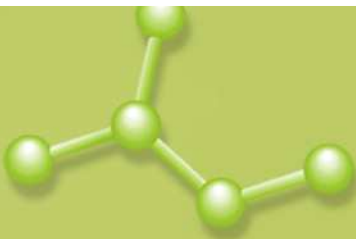
Order Entry using Configurator



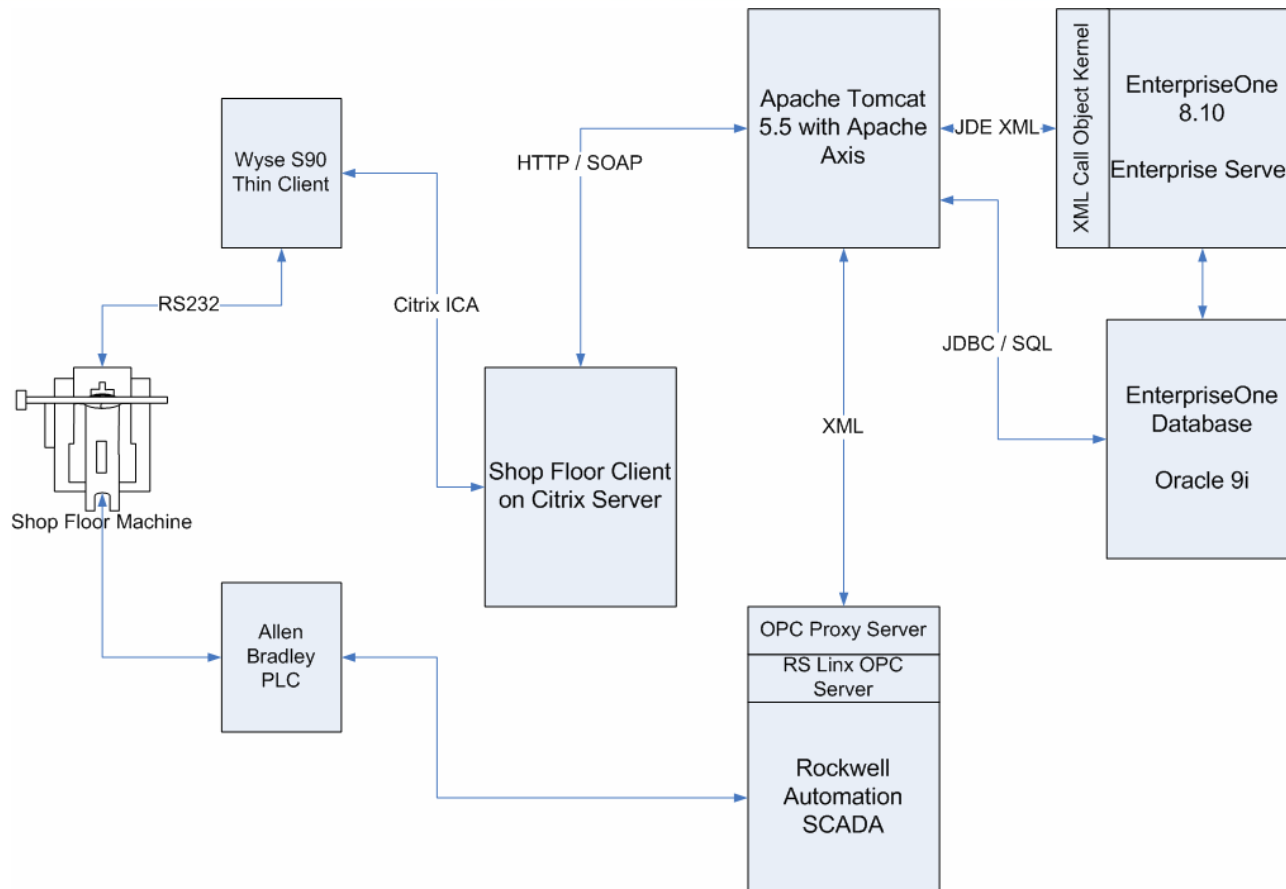


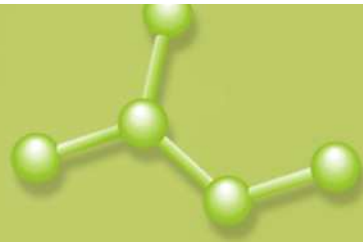
Production – The Real World

- Neumann Steel process 1,000 to 2,000 configured sales order lines per day which introduces a number of issues with regards to scale
- A single quote order can contain over 1,000 line items and take a number of hours to enter. In the early days cache problems would cause the save process to fail and all work was lost
- Due to the number of segments the configurator details table is very large. It is currently around 90,000,000 rows or 27Gb of data. This required a bit of work at the database level to maintain performance
- With most work orders only requiring a few minutes for manufacturing, it is not practical to record actual hours and quantities for each work order. For most sites a custom JDE completion program is available which will complete all lines on a sales order in one hit using super backflush. For the main manufacturing site a custom developed shop floor application was developed.



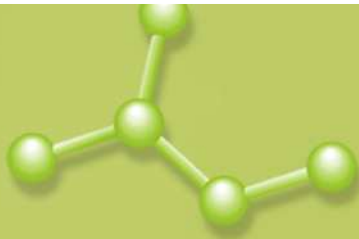
Shop Floor Integration





Shop Floor Client Demo





What have we learnt

- As with all things JDE, KISS is the best principle
- From the point above, configurator can just about do anything you want in terms of working as an expert system but actual setup and maintenance would kill you. We found the introduced functionality of being able to call external business functions from within a segment to return a result made life much simpler and greatly improved the functionality provided to the users.
- Configurator can be a harsh mistress. We have around 50 or so lines per month that fail to create configurations correctly. When you have over 20,000 lines per month, it makes replicating the issue for GSC %#\$^ing impossible. We believe our problems lie with cancelling lines and some users running two citrix simultaneously. When we have \$250,000 in our consulting budget we may be able to get to the bottom of it.