Solution Provider





PMC HYDRAULICS - Your global expert in hydraulics



Hydraulic expertise for your application

PMC Hydraulics is the leading provider of customized hydraulic systems and components for customers in the industrial, energy, mobile and marine sectors.

Nordic leader with global reach and local presence

Having operations across the Nordic countries, and production sites in Poland, China and India, we are the global expert for our customers with a strong local presence.

Hydraulics power optimized to your needs

Our comprehensive choice extends from components to customized systems. We also represent brands from leading component suppliers.



The Case

How can we be more Cost Effective and Improve our Competiveness, with a different Warehouse Set-up and the Way of Working with Equal or Improved Customer Service

- » Reduce Cost, both Fixed and Direct
- » Improve our purchasing to get a positive effect on Quantity Based Discounts
- » Improve Inventory Performance
- » Lead time effects

Can we have one Central Warehouse and if Yes,

Where? What is the Expected Effect?



Present Set-up

Country	Assembly	WH
SWEDEN	3	3
FINLAND	2	3
DENMARK	2	2
POLAND	1	1
CHINA	1	1
INDIA	1	1
COUNT	10	11



Centralized Warehouse



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Scenarios

- 1. Existing Warehouses remains in each country, but optimization based on what items to be purchased from each country
- 2. Centralized WH on "optimal" location, might require some Hubs in different countries
 - 1. Existing premise/location
 - 2. New location
- 3. Centralized WH in Poland close to existing factory in Szczecin This require renting new premise / building a new WH



Selection Process

- Meetings with different Consultant Companies
- Important to get facts, for decision making and to be able to convince other stakeholders
- Time for deliverables was extremely important
- Experience from similar projects and existing tools/processes
- Not a *one man show*, and someone to question our own pre-assumptions
- Resource demand from our company should be limited
- "At the end a good feeling"



The Project

- Time plan very tight with clear dates with deliverables
 - Decision to make the project in two phases
- Project Team, Project Meetings
 - Critical with correct resources able to extract data from ERPs
 - Able to make simplifications on inaccurate data
 - Follow-up for validation and checks
- Data
 - Cost Components
 - Transaction data
 - Most data extracted from different ERPs but also freight cost/times from freight forwarders



Concept of analysis in two steps



Supply Chain model to optimize network

- Point of Gravity calculation for demand
- Minimize total cost per scenario
 - Transport
 - Inventory
 - Purchase
 - Fixed WHS
- Sensitivity analysis
 - 2019 demand

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Current network (as-is): Existing supply chain with 7 local warehouses



- Local presence in all market
- The total supply chain cost in the model equals XX MEUR, covering the components and spare parts sales from 7 WHSs in 4 countries

Total supply chain cost





SC1: One WHS based on point of gravity suggests a central warehouse in Tampere



Outbound flows from central whs

- Potential in total cost reduction with only one WHS in Finland used instead of 7 local WHSs.
- Increased lead time to customer



Concept of analysis in two steps



SC1: Small overlap in assortment limits the purchase cost effect

- Purchase cost per country
- Best price applied to all countries
- Potential saving

	FIN	SWE	DEN	POL	Grand Total
Total Purchase Value (EUR)	20 700 007	00.107.707	/ 0/0 000	0 707 007	
Purchase Value multi site products (EUR)					
PurchaseValue Min multi site products					
Potential					

 The effect of a central purchase setup is independent of the location of the warehouse



SC1: Total inventory level has a small potential to be reduced by a central WHS structure

- By centralizing stock to one WHS total inventory value can be reduced
 - Limited potential due to _
 - between markets



Service Level

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100%

SC1: Transport time to customers from Tampere is in many cases a couple of days longer than today





Findings

- Overlapping articles far less than assumed
 - Effect will be less positive than expected
- Point of Gravity (Volume and distance factor)
 - Opens up two pretty equal candidates
 - Will lower Customer service
- Lowest Cost option point on
 - One specific location of centralized WH
 - Worst Customer Service
- Best Customer Service
 - One WH in every country

Lessons learned:

- Great with some quantitative data for decision making
- Several options to be considered dependent on what factor to optimize - at the end a qualitative decision
- A lot of findings that can be used to build up a different strategy for a longer term

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