

**Service Excellence
A Customer Oriented
Quality Philosophy**



**ESTAL Congress
6th October 2006**

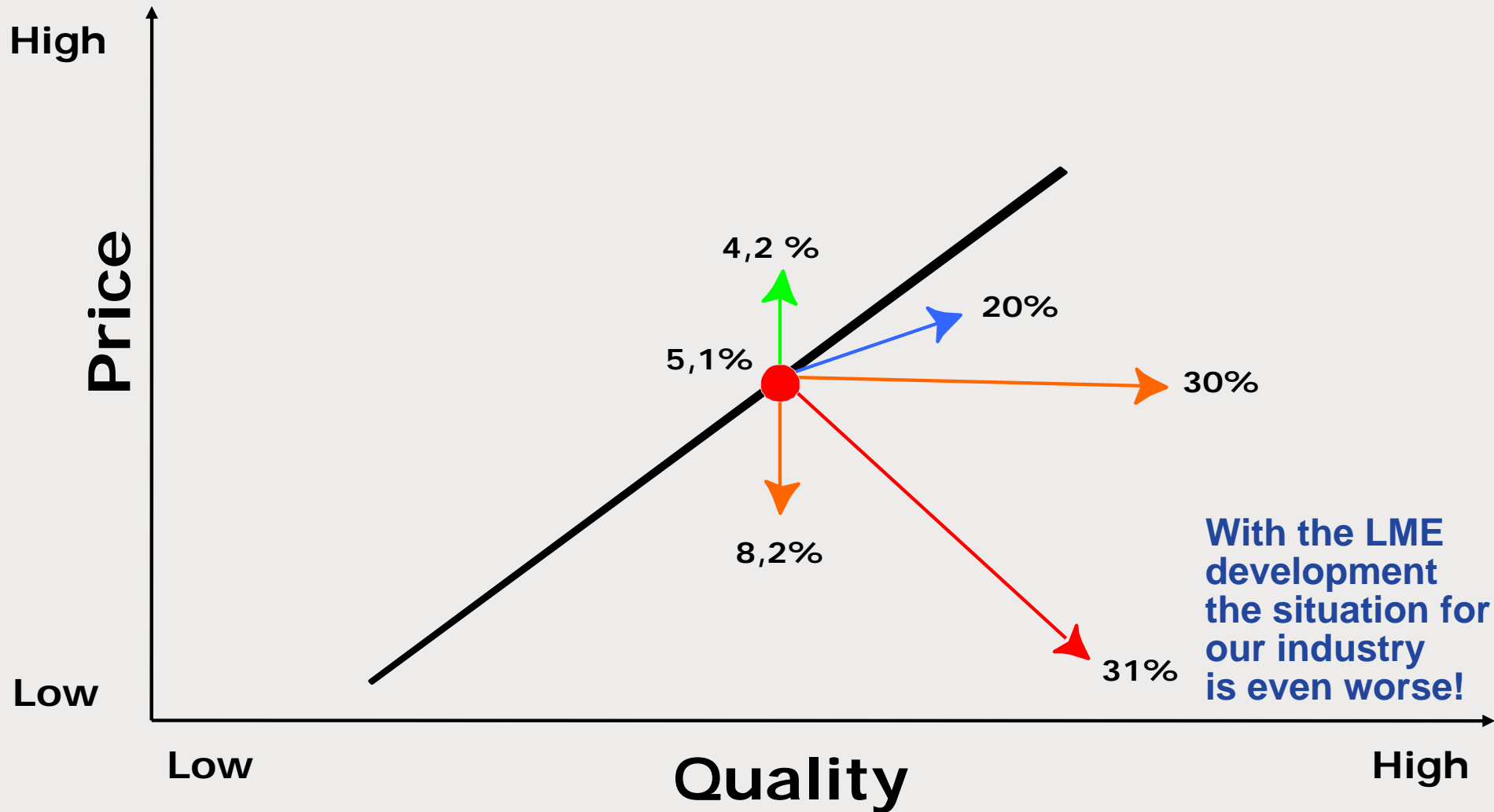
**Dr. Gerold Trommelschläger
Hydro Aluminium Products, Extrusion Nenzing**

- ... is the totality of characteristics of an entity that bear on its ability to satisfy stated and implied needs (ISO 8402)
- ... is the ability to fulfill the demand of customers and other interested parties (ISO 9000:2000)
- ... is the realization of the goals set up in the corporate policy
- ... is fitness for use
- ... is when the customer returns and not the product



**Quality is
what the customer wants**

Price and Quality Development over recent years in Mature Markets



Product Attributes

Future Tendency

- | Product Attributes | Future Tendency |
|--|-----------------|
| • Dimensional accuracy | ↑ |
| • Surface finish top decorative <ul style="list-style-type: none">• Colour streak free• Roughness• Etching pattern | ↑
↑
↑ |
| • Packaging requirements | → |
| • Mechanical strength properties | → |
| • Zero defect | ↑ |
| • Wall thickness | ↗ |



Other Requirements

Future Tendency

- Price/performance ratio



- Delivery on short notice



- Fast transport



- Communication
 - Info exchange
 - Delivery status
 - Capacity outlook



- Optimizing profile during construction



- Fast claim handling practices



- Speed (ie leadtime reduction, processing of complaints, subsequent delivery)



Other Requirements

Future Tendency

- Delivery on time



- Flexibility

- Layout change
- Delivery date changes



- Fast reaction in case of non-conformance



- Perfect Prototype



To accomplish customer wishes/challenges a joint effort of extruders/alu finishing industry is necessary

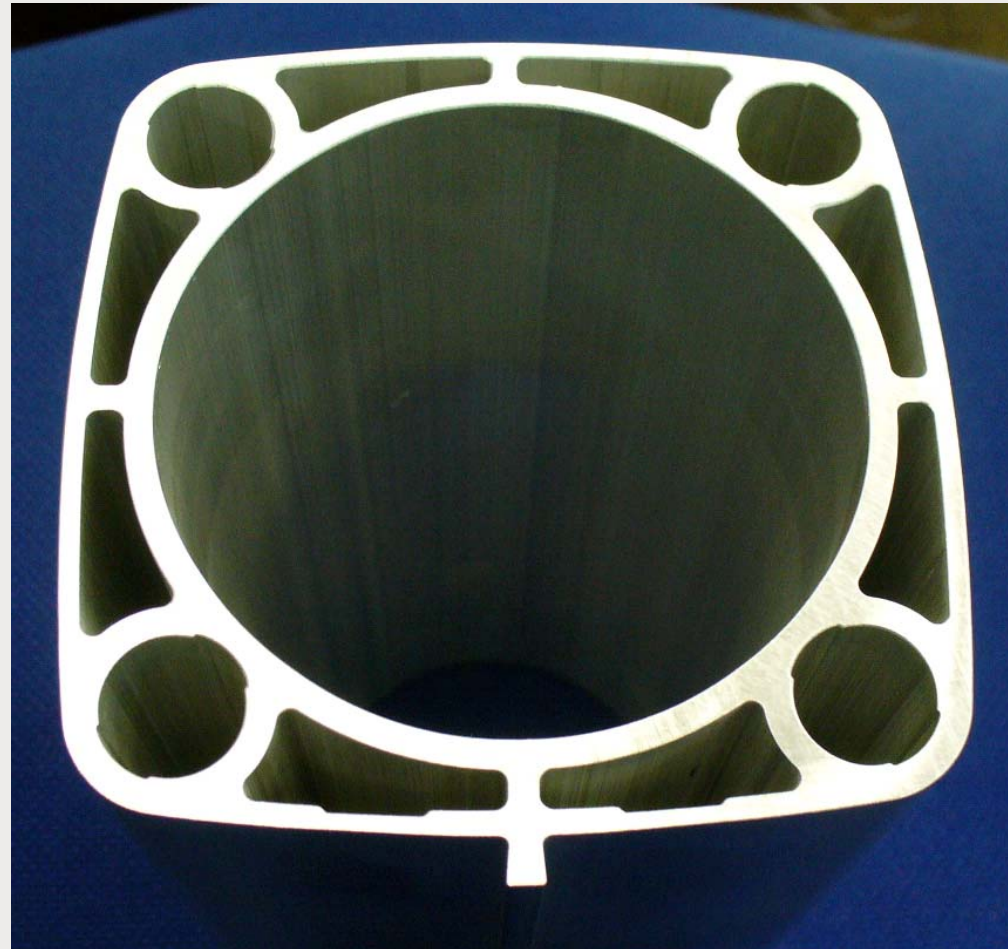
Challenge:

New **Pneumatic Cylinder** generation requirements

- surface roughness of +/- 5 mm

Diameter 80 mm

- tolerances of + 0,3 mm; - 0 mm



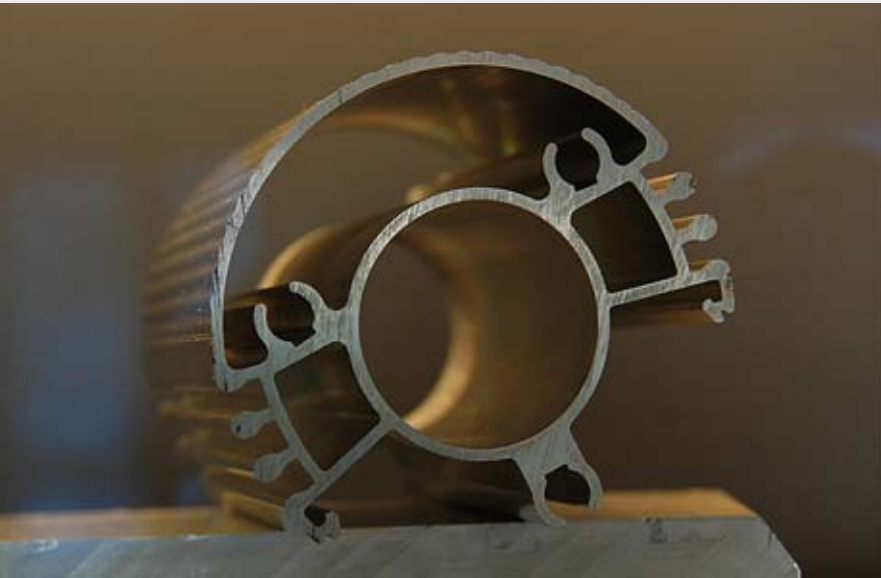
Challenges Hard Anodizing

- Constant diameter (layer thickness)
- Hardness surface
- Surface porosity

Challenges Extrusion

- Diameter tolerances
- Roughness
- Straightness / Stretch response

...with each one working within his competence centre.



from extruded
aluminium profiles

TO

surface treated and
fabricated profiles

Covering the total Supply Chain



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Harmonize IS-Systems (EDI, Intranet, ...) for proper information flow

A World Class Aluminium Profile Supply Chain

FROM

- On Time Delivery
- Logistics
- Inventory Reduction
- Selling our Profiles

TO

- Full Customer Service
- End to End Supply Chains
- Cash Flow Management
- Selling our Capabilities

Let's get closer to our Customers!

