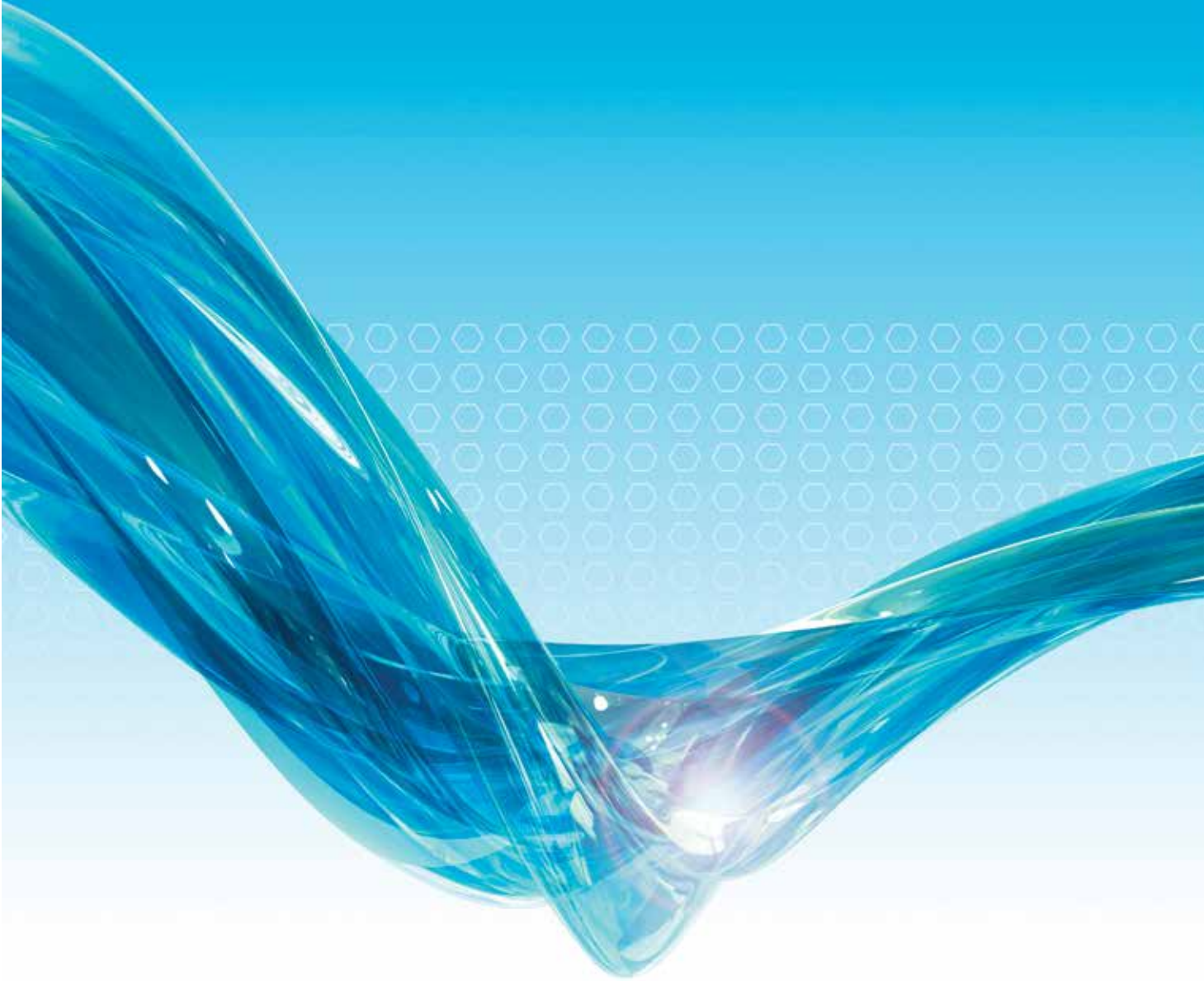


Eaton Hydraulics Rapid Prototyping EMEA

# Drive your projects forward



**EATON**

*Powering Business Worldwide*



# With Eaton Hydraulics` powerful ProTeam, you can drive your projects forward

Developing or upgrading vehicles and machines is not an easy job. Time, money, know-how and a lot of engineering expertise are required to make the project a success.

All the necessary components must be optimally positioned and need to be connected to one another in the end. In other words, this is the right time to consult a specialist.



## Input needed

- 2D drawing
- 3D model
- Part description
- Reference part
- Access to the machine to define the components



## Duration

- 24-48 hours for standard parts
- 2-5 days for customised items of medium complexity
- 5-10 days for complex parts
- Field engineering included, as required



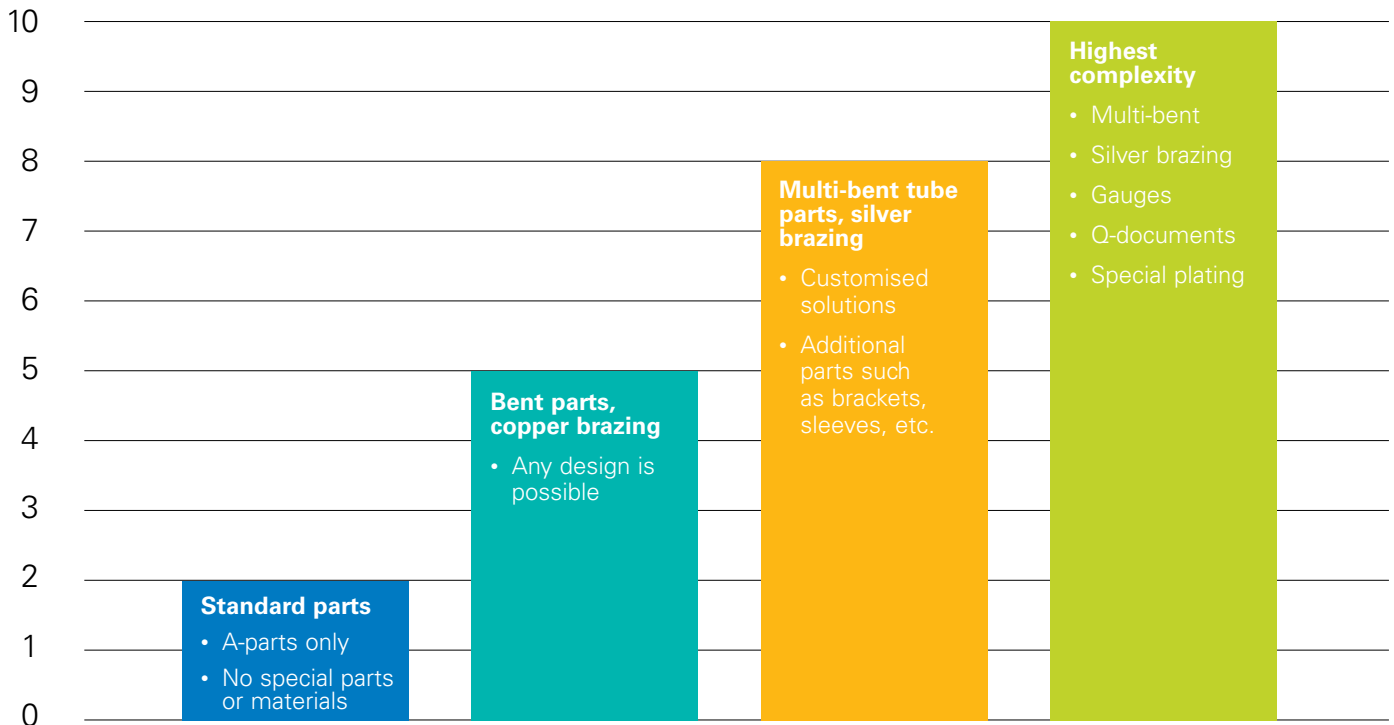
## Outcome

- Proof-pressure-tested hose assembly
- One-end crimped hose assembly, if additional on-site optimisation is needed
- Tube assembly





# From sketch to prototype in just a few days

Eaton's ProTeam consists of highly skilled and qualified technicians with a lot of experience in selecting the right hydraulic hose & fitting products to ensure the reliable and sustainable operation of your machine. The ProTeam can quickly produce the required prototypes, to a high standard of quality and at a competitive price. Simply send us 2D/3D drawings, part descriptions or reference parts, or schedule an on-site consultation to specify the necessary components and technical data. Depending on the degree of complexity, we are able to offer the following processing times:

- 1–2 days for standard hose assemblies
- 2–5 days for hose assemblies of medium complexity including customised fittings
- 3–8 days for customised solutions including special fittings, brackets, sleeves, etc.
- 5–10 days for highly complex, multi-bent tube-hose combinations including certification and documentation



## Just a few days from sketch to your prototype

Category 1	Category 2	Category 3	Category 4
<p>Simple hose assemblies with standard catalogue fittings</p> <p><b>Application examples</b></p> 	<p>Hose assemblies of average complexity, with copper-brazed fittings; simple tube assemblies</p> <p><b>Application examples</b></p> 	<p>Same as category 2, plus customised parts such as protective coils, silver brazed fittings, spiral hoses</p> <p><b>Application examples</b></p> 	<p>Complex hose or tube assemblies that exceed category 3, with customised parts of high complexity</p> <p><b>Application examples</b></p> 

# Working for your success

## Leverage the value of a physical prototype to:

- Verify the hose routing in your machine by means of computer-aided 3D modelling based on a physical prototype
- Conduct performance assessment at early stages for functional and field testing
- Optimise your hose assemblies with regard to hose-assembly length, connection configuration and connection ends
- Select and determine the most suitable products from Eaton's portfolio
- Benefit from our simple, unbureaucratic ordering process
- Benefit from free prototyping, depending on the business case

## Field engineering

### Optimal routing increases product life time and reliability

Improved routing



A customer-designed solution led to recurring issues due to a bent adaptor nipple

The issue could be resolved by applying a straight nipple and adjusting the routing of the other parts

## Field engineering

### Customer training

All hose lines must have the same radius and intermediate lengths



- We visited the customer service team on location
- We provided general advice to the service staff on hydraulic hoses & fittings
- We focused on the installation of the hose lines connected to the customer's vehicle



Correct implementation of the assembly instructions increases product life times

# Special capabilities

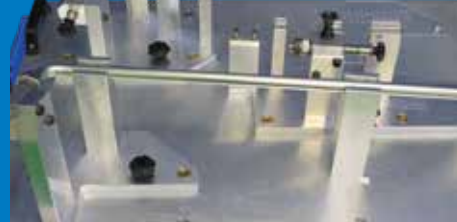
## Special capabilities

### We put our expertise to work for you:

- 3D multi-bent, customised tube assemblies including control gauges up to size -40 (DN 60) and 3 mm wall thickness
- Monobloc and copper/silver-brazed, 3D bent, customised fittings up to size -32 (DN51)
- Tube assemblies with solderless ends thanks to the Walform technology
- Proof testing of low- and high-pressure hose assemblies



Nipple bending up to size -32 (DN51) for high-pressure spiral-hose assemblies



Customised hose and tube assemblies with control gauge



Copper and silver brazing of customised fittings



Proof testing of low- and high-pressure hose assemblies

## Interested?

Please contact our ProTeam at [ServiceCenterHYD@Eaton.com](mailto:ServiceCenterHYD@Eaton.com) or call +49 (0)7221 369







