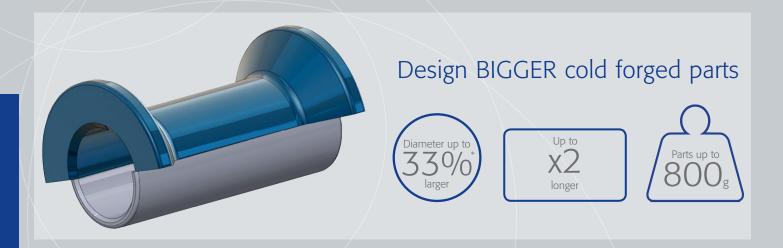


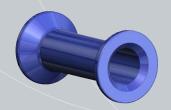


New Cold Forging Capability from Simmonds



Howmet Fastening Systems continues to develop its engineering expertise and capability at its St Cosme Operations and can now offer you and your engineering team the ability to design even bigger and more complex cold forged parts.

Key Advantages



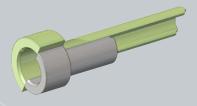
Segment open die

Our new open die forging process gives you the opportunity to cold forge even more complex parts. This innovation allows part weight reduction as well as "bone" shape parts.



■ Enhanced range

From thin and light parts to large and heavy parts, our new cold forging capabilities give us the possibility to forge a greater range.



Bigger cold forged parts

Our new generation forging press enables us to increase part size. We can now produce parts up to 165mm in length (previously 80mm), with a larger diameter now up to 54mm (against 48mm before). And heavier parts (up to 800g instead of 350g).

Howmet Fastening Systems

St Cosme Operations, 9 rue des Cressonnières 72110 Saint Cosme en Vairais, France

Tel: +33 (0) 2.43.31.41.00

Fax: +33 (0) 2.43.31.41.41

BSI Registered

FM 500602 FM 500661 EMS 500663

ISO 9001:2008 TS 507118-000 ISO/TS 16949:2009 EN 9100:2003 AS 9100 Rev. B ISO 14001:2004





Technical Data

	Before	Now	
Forging load (t)	450	650	
Number of dies	6	6	
Max. coil Ø (mm)	28	33 (36 for specific raw material)	
Max. external finished part Ø (mm)	48	54	
Max. part length (mm)	80	165	
Load monitoring	Automatic	Automatic	
Trimming (external cutting)	Limited	Yes	



Our New Cold Forging Press

Example of parts that can now be produced

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Parts Family	Legend	Before	Now	3D Model	Comments
Tow Eye	ø ext. ø int. max. length	37.5 28 90	50 32 165	The second secon	Larger diameter Greater length
Headed Sleeve	ø ext. ø int. max. length	37.5 26 80	50 32 140		The head dimension is linked to the overall length
Sleeve with Shoulder	ø ext. ø p length (p) length (L)	37.5 31 65 80	50 37.5 65 140		The shoulder dimension is linked to the overall length
Locking Sleeve	ø ext. max. length	37.5 75	50 130		Locking sleeves can be manufactured with or without: • Flange • Internal teeth
Fuse Nut Wheel Nut	ø ext. max. length max. length (cH)	n/a	54 15 45		Fuse and wheel nuts are now feasible

Dimensions in mm.

Other operations after cold forging are available: Tapping, Secondary Machining Operations, Heat Treatment, Surface Treatment, Final Inspection.

Application fields: Diameters: Weight: Materials:

Industrial sectors, Automotive.

External part diameter from 20 to 54mm.

Up to 800g.

Carbon steels, stainless steels, aluminum alloys.

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