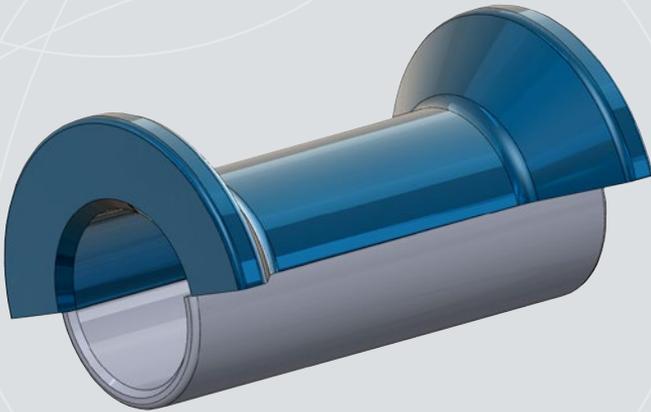
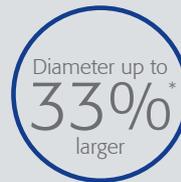


## New Cold Forging Capability from Simmonds

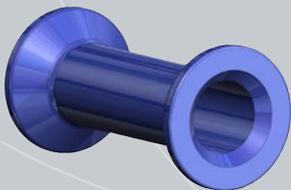


Design **BIGGER** cold forged parts



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



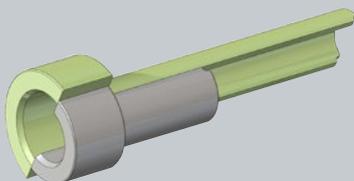
#### ■ Segment open die

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

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#### BSI Registered

FM 500602	ISO 9001:2008
TS 507118-000	ISO/TS 16949:2009
FM 500661	EN 9100:2003
FM 50061	AS 9100 Rev. B
EMS 500663	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

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

Dimensions in mm.

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

<b>Application fields:</b>	Industrial sectors, Automotive.
<b>Diameters:</b>	External part diameter from 20 to 54mm.
<b>Weight:</b>	Up to 800g.
<b>Materials:</b>	Carbon steels, stainless steels, aluminum alloys.

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