Innovative solution for metal transformation

IMPROVED MACHINABILITY STAINLESS STEEL

Setforge

SIMPLIFICATION

Machining tools lifetime up to 5 times longer.
Better chip fragmentation.

PRODUCTIVITY

Reduction of cutting forces.
Increase of the cutting velocity up to 50%.

OPTIMISATION

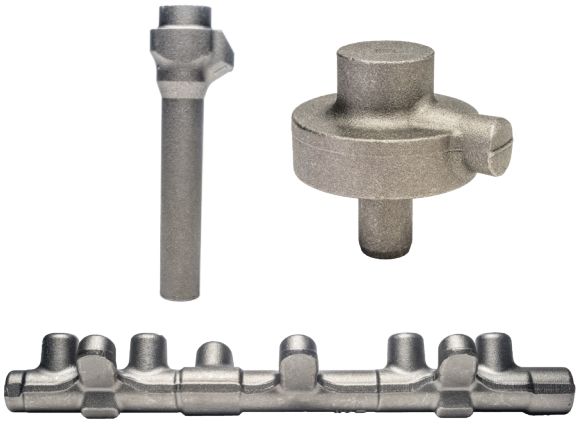
Finished parts less expensive due to lower machining costs.

Improved machinability stainless steels can significantly optimized machining operations of forged parts by the control of the steel metallurgy. Their use allows a significant increase in productivity thanks to the increased cutting speed, a better machining tools lifetime and a better chip fragmentation.
The mechanical properties required for the application do not change.

Prerequisite

Adjust machining parameters to maximize machinability improvement .
POSSIBLE SUPPORT FROM THE STEEL MAKER

Improved machinability stainless steels can be used for any stainless steel parts that must be machined after forging (turning, milling, drilling, etc...)



Stainless steel injection components

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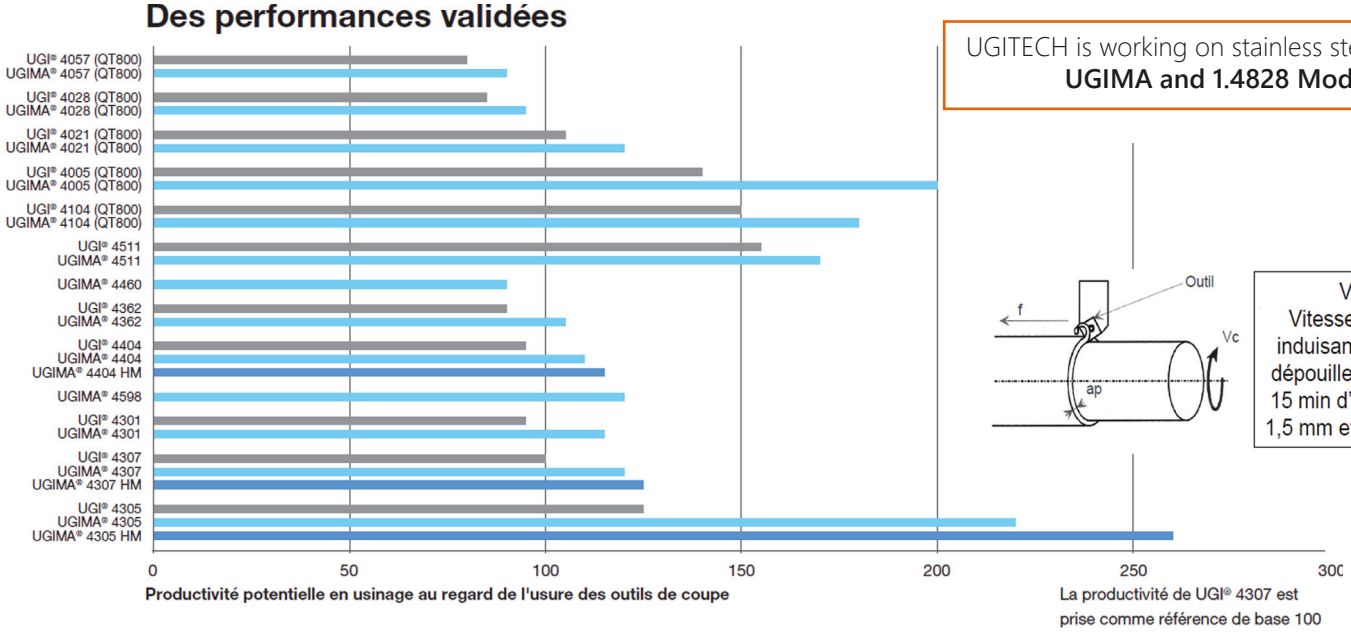
EXISTING SOLUTIONS ON THE MARKET

Setforge is working in close collaboration with **the most innovative steelmakers on the market to develop the solutions of tomorrow.** Our purchasing and engineering teams are at your disposal in order to assess the potential metalurgical and economic gains of these solutions for your business.

UGITECH

Extract from UGITECH documentation

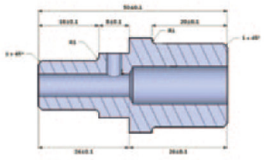


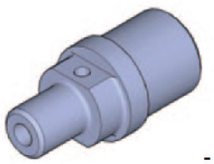
UGITECH is working on stainless steel range **UGIMA and 1.4828 Mod**

$VB_{15/0,15}$: Vitesse de coupe V_c induisant une usure en dépouille de 0,15mm en 15 min d'usinage (à a_p = 1,5 mm et f = 0,25 mm/tr)

Valeur d'usage

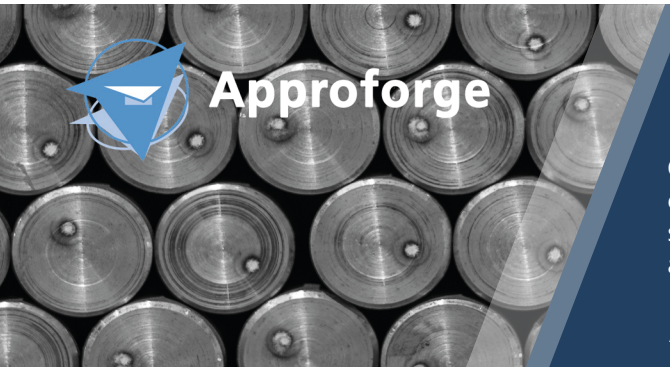
	1.4404 Standard	UGIMA® 4404HM
Coût matière (€/pièce)	0,84 €	0,88 €
Productivité (pièce/h) (efficacité 83%)	46	57,7
Coût d'usinage (€/pièce)	0,98 €	0,78 €
Coût total (€/pièce)	1,82 €	1,66 €
Gain (€/pièce)	-	0,16 €
Gain pour une série de 10000 pièces	-	1 570,00 €





- Usinabilité (Tournage) sur ∅73mm

Nuance	$VB_{15/0,15}$
1.4828 Std	**195** m/min
1.4828 bas C mod	**225** m/min



FOCUS ON INNOVATION

APPROFORGE, purchasing specialist of raw materials for Setforge Group, one of the leading group in Europe in the production of forged components, has set-up a co-development team to provide innovative solutions to their customers in order to bring them a competitive advantage by reducing the overall cost of acquisition of their parts.

Ask for more : **innovation.approforge@setforge.net**