



Invotec and Stamixco Plasticizing Components

Invotec's own range of in-house plasticising components offer you a full solution for nozzles, tips, mixers, filters and shut off assemblies.

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Invotec
SOLUTIONS

Nozzle Tips



Invotec manufactures a large range of nozzle tips that are used with our own removable tip nozzle bodies and are fully interchangeable with other nozzle bodies of this style.

We also manufacture tips that are fully compatible with Arburg, Demag, Klockner and Fanuc style tips.

Highest quality polished chrome vanadium steel nozzle tips with standard 7/8" 14TPI threads.

Our tips are manufactured from solid bar, fully hardened (48-52 Rc) and fully polished.



Invotec Removable Tip Nozzle Bodies

Removable tip nozzles are used by 1000's of moulders worldwide. Invotec nozzles are proven to save you time and money again and again. All Invotec nozzles are top quality at unbelievable prices.

In many cases it is only necessary to use one nozzle body across a range of tools, only needing to quickly change a simple tip with your choice of radius and orifice.

The tip is changed in seconds with a simple spanner, reducing tool change times dramatically. Many tips are available from stock with any combination of Orifice and Radius, for General purpose, Nylon or Full Taper ABS styles.



For more information and full technical specification visit: www.invotecsolutions.co.uk/eng

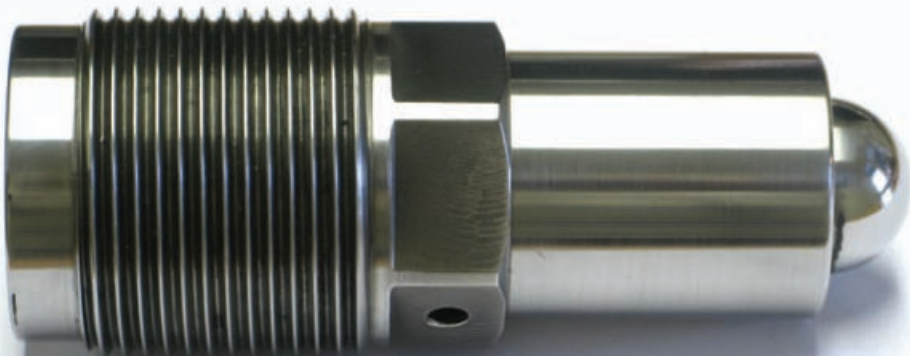
WHY BUY?

- ✓ Fast Tool Changes
- ✓ Standardise nozzle bodies
- ✓ Reduce heater band stocks
- ✓ No messy nozzle changes
- ✓ Standard lengths or to your design



TECHNICAL FEATURES

- Manufactured from EN19T
- Standard 12.7mm bore ready to take your (or our) existing tips of 7/8" 14 TPI



TECHNICAL FEATURES

- S1 Tool steel
- Standard 12.7mm bore or to your choice
- Hardened 48-52 Rc

WHY BUY?

- ✓ Highest Quality
- ✓ Quick delivery
- ✓ Quality Steels
- ✓ Polished internal surfaces for minimal hang ups

Invotec Solid Nozzles

Invotec Solid Nozzles are manufactured to the highest standard using only the best steels for the job.

All Invotec solid nozzles are

made from a special chrome/vanadium/tungsten tool steel, fully hardened, shock resistant and very tough. Built to withstand high temperatures without undue fatigue.

Invotec Internally Heated Nozzles



Based on Invotec removable tip nozzles our Internally heated models come complete with an internal coil heater protected for long life with an outer steel protection cover are proven to save you time and money.

Designed for the harshest enviroment internally heated nozzles offer excellent mechnaical protection and are very resistant to blow back situation.

Heater band life is increased and they offer a very fast payback when compared to the regualr need to change standard nozzle bands.



TECHNICAL FEATURES

- Manufactured from EN19T
- Standard 12.7mm bore ready to take your (or our) existing tips of 7/8" 14 TPI

WHY BUY?

- ✓ Nozzle heater life is increased
- ✓ Offer the best mechanical protection
- ✓ Increase heater band life
- ✓ No messy nozzle changes
- ✓ Price includes coil heater and choice of tip.
- ✓ Standard lengths or to your design

Mixing Elements - Stamixco Static Mixers



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The Stamixco Mixing Nozzle SMN contains 8 very efficient static mixing elements that homogenize the polymer melt during injection.

The mixing elements are virtually indestructible and create a low pressure drop (30% to 50% lower than other standard products).

The SMN mixing Nozzle has an impressive price/efficiency ratio which results in a very short pay back period of a few days to a few weeks in most cases.

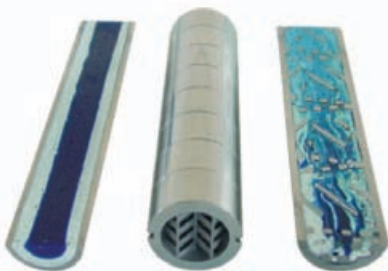
The SMN Mixing nozzle is available in various sizes covering applications from small to large shot weights. All sizes of the mixing elements are available from stock.

We believe this is the best static mixer available in this sector



WHY BUY?

- ✓ Reduced spots, streaks and clouds of colour.
- ✓ Reduced colorant usage (10% - 40%).
- ✓ Narrower part tolerance.
- ✓ Reduced reject rates.
- ✓ Less part distortion.
- ✓ Less weight variation.
- ✓ Improved part quality when using regrind material.
- ✓ Shorter cycle time.
- ✓ Improved melt flow.
- ✓ Increase regrind ratio with consistent product quality.
- ✓ Rapid nozzle heat-up.
- ✓ Quick Payback - Weeks in many cases



For more information and full technical specification visit:
www.invotecolutions.co.uk/eng

Invotec Cylindrical Filters



Our new industry leading cylindrical filters offer an upgraded design, manufactured from higher wear resistant materials all at unbelievable prices.

The old design, which is still available in some areas of the market, uses only a "weir" style of filtration and whilst this can offer small levels of filtration it does not stop long slivers or shards of contamination.

Our new design forces material through a melt hole and along a

flow channel to a dead end. This results in the material being forced through each individually machined 0.6mm castle styled groove, ensuring perfect filtration an easy cleaning.



TECHNICAL FEATURES

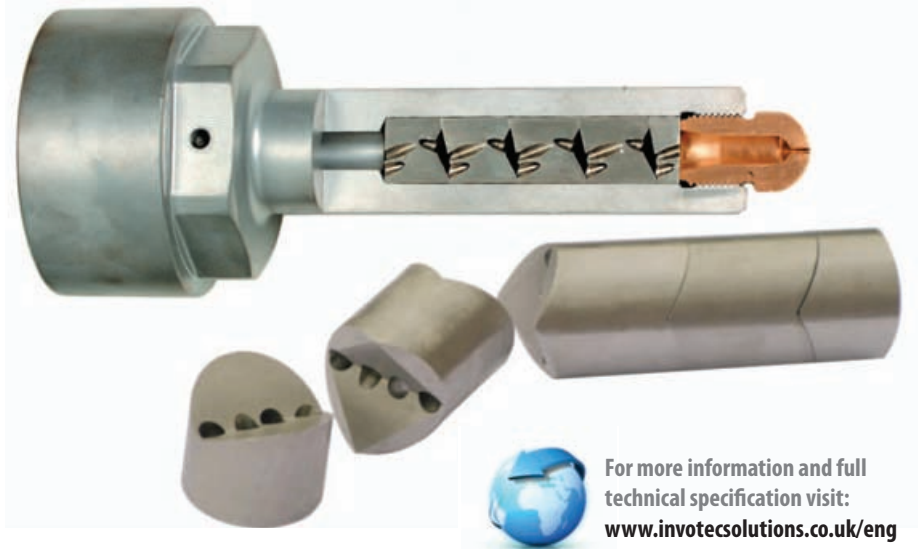
- Material: 416 Stainless Steel hardened to 40 Hrc
- 3 sizes available - 14mm diameter x 45mm long, 16mm diameter x 67mm long and 22mm diameter x 101.6mm long
- Filtration: 0.6mm

Invotec ISG Style Mixers

The Invotec ISG style static mixer offers exceptional mixing qualities for a very low investment.

Consisting of 5-6 mixing segments located in the nozzle body each segment has 4 flow paths machined at oblique angles. That is to say material exiting one element then enters close to the centre of the next element and exits near the wall. The elements are shaped in such a way as to create a tetrahedral symmetry.

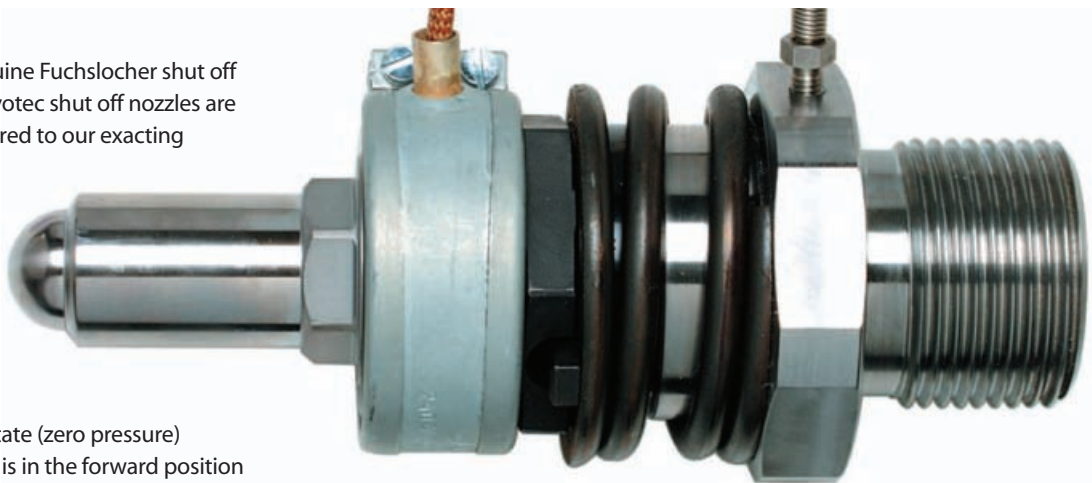
Now manufactured from 416 Stainless Steel which is also hardened to 40 Rockwell (Hrc) ensuring the best balance of toughness and corrosion resistance.



For more information and full technical specification visit: www.invotecsolutions.co.uk/eng

Shut Off Nozzles - Fuchslocher

Using genuine Fuchslocher shut off units all Invotec shut off nozzles are manufactured to our exacting standards.



Operation

In the off state (zero pressure) the needle is in the forward position meaning the outlet bore is closed. This is achieved with the pre-clamped spring, which forces the pressure over the bridge to the needle. If the dynamic pressure or injection pressure overcomes the spring-stress the nozzle opens automatically. The spring-pressure closes automatically if the specific injection pressure reduces.

Complete assemblies come with your choice of nozzle (radius and orifice) a heater band and J type thermocouple.



TECHNICAL FEATURES

- Permissible injection pressure: Up to 3000 bar (with G1 head) Up to 2500 bar (with G2/G3 head)
- Nozzle opening pressure: 200-250 bar standard spring 300-350 bar modified needle
- Outlet bore: \varnothing 1,5 mm cyl./ from \varnothing 1,7 con. Max. \varnothing 6,0 mm
- Nozzle heater band: 50 x 22 mm, 230 V, 270 W Leads: 1000 mm Output 45° axial

WHY BUY?

- ✓ No material loss
- ✓ No drooling of the material
- ✓ No contamination of the nozzle or sprue
- ✓ Inject and purging away into the open tool is possible
- ✓ Fast colour and material change
- ✓ Higher pre-compressing because of modified needle
- ✓ Reduction of the cycle time because of faster program operation
- ✓ Parallel dosage during the opening of the tool

Invotec Nozzle Body Dispersion Disks



Dispersion disks are the ideal filter to improve material dispersion, removal of unplastified granules' and offer protection from unwanted foreign debris.

Dispersion discs are designed to be machined into our standard removable tip nozzles, locked in place with our standard tips. (A small boring charge may apply).



TECHNICAL FEATURES

- Material: 316 Stainless Steel. Tough and corrosion resistant
- Dimensions: 9 holes 3.18mm diameter reducing to 1.14mm diameter – Total area of filter holes 9.18mm
- Also available to your own dimensions

Invotec Nozzle Tips and Body Filters



Nozzle Tip and Body Filter disks are machined into the body of the removable tip nozzle or the removable nozzle tip. Different sizes of filtration are available ensuring foreign objects do not enter the moulded area or damage expensive hot runner systems.

Tip Filter disks offer 3 choices of filtration 0.6mm – 0.8mm & 2.4mm. Body filter offer two options 0.6mm & 0.8mm filtration.



TECHNICAL FEATURES

- Material: 316 Stainless Steel. Tough and corrosion resistant
- Dimensions: Nozzle Body Filter are 16mm diameter and 5mm thick – 0.6mm filtration (49 holes) gives a surface area of 13.85mm and 0.8mm – 18.6mm (37 holes).
- Dimensions: All Tip Filters are 13.2mm diameter and 5mm thick – 0.6mm filtration (49 holes) gives a surface area of 13.85mm and 0.8mm – 18.6mm (37 holes), 2.4mm – 31.67mm (7 holes)

For more information contact your local distributor

Affix distributor stamp here.

Discover us at:
www.invotecsolutions.co.uk

In the event there are no distributor details above, please contact:

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