



IRMCO APPLICATION LIST - please see the pictures in the related folders as application samples.

1) PRODUCT IRMCO GEL 980 000 - Bending process

This product is a gel with a gel viscosity not falling on the floor and sticky enough to stay on tools. It evaporates over the piece after it has worked to boost viscosity and allow the required metal deformation. Over weldable and occasionally over paint-able

Pieces that can be used for:

Any circular tube, of any material with any mandrel material, that needs a mandrel inside during bending.

Tool material preferred: Bronze

Tool material welcome: steel, chrome mandrels, plastic mandrels

2) PRODUCT IRMCO GEL 980 301 - Bending process

This product is a gel with a gel viscosity not falling on the floor and sticky enough to stay on tools. It evaporates over the piece after it has worked to boost viscosity and allow the required metal deformation. This product has micro-water balls inside that explode during the process. Those micro balls make this product stronger than IRMCO GEL 980 000. Over weldable and occasionally over paint-able

Pieces that can be used for:

Any circular tube, of any material with any mandrel material, that needs a mandrel inside during bending.

Tool material preferred: Bronze

Tool material welcome: steel, chrome mandrels, plastic mandrels

3) PRODUCT IRMCO GEL 980 020 - Bending process & Stamping process

This product is a semi-gel with a high viscosity falling on the floor but sticky enough to stay on tools. It evaporates over the piece after it has worked to boost viscosity and allow the required metal deformation. This product is less performing than Irmco gel 980 000

Pieces that can be used for:

Any circular tube, of any material with any mandrel material, that needs a mandrel inside during bending. Any part stamped in Aluminum which are requiring a "thick film" product.

Tool material preferred: Bronze

Tool material welcome: steel, chrome mandrels, plastic mandrels

4) PRODUCT IRMCO EXTREME 980 460 - Bending process

This product is a white paste with a high viscosity falling on the floor but sticky enough to stay on tools. It mostly evaporates over the piece after it has worked to boost viscosity and allow the required metal deformation. This product is performing well all over but leaves a stronger residue left that could impact some next steps. Over weldable and occasionally over paint-able

Pieces that can be used for:

Any circular tube, of any material with any mandrel material, that needs a mandrel inside during bending.

Tool material preferred: Steel

Tool material welcome: bronze, chrome mandrels, plastic mandrels

5) PRODUCT IRMCO FLUID 980 080 - Bending process & Stamping process

This product is for heavy-duty metal forming and deep drawing parts with great performance on bending too.

It can be diluted with demi water at different % based on the application.

Bending applications:

For bending application is used neat with exotic materials like Titanium and Inconel or diluted at 20% for any other material. It has approvals for aerospace.

It mostly evaporates over the piece after it has worked to boost viscosity and allow the required metal deformation. This product is performing well all over. Over weldable and occasionally over paint-able

Pieces that can be produced:

Any circular tube, of any material with any mandrel material, that needs a mandrel inside during bending.

Tool material preferred: Bronze or Chrome mandrels

Tool material welcome: still mandrels, bronze, plastic mandrels

Stamping application:

It's NOT welcome over galvanised or zincate material.

It is welcome on aluminium parts.

This product is designed for deep drawing applications for many shapes.

At 20% dilution (20% product - 80% water) can do parts from 0,5 to 2 mm thickness.

It can support many different kind of parts which has bending, drawing, and punching operations inside the same piece.

It works very well for multistage tools, from 1 to 15-20 steps max with a calibration process at the end very often.

It can be applied over the coil from one or both sides of the metal.

At 40% dilution can do parts from 2 to 10 mm thickness

6) PRODUCT IRMCO FLUID 980 156UK - Stamping process ONLY

This product is for medium & heavy-duty metal forming and AHSS automotive materials/parts with great performance substituting chlorinated oils.

It can be diluted with demi water at different % based on the application.

Stamping application:

It's welcome over galvanised or zincate material plus any other material.

It is NOT welcome on Aluminum.

This product is excellent for the perforating process and bending which is done over any steel for many shapes.

At 10% dilution (10% product - 90% water) can do parts from 0,5 to 1,5 mm thickness.

It can support many different kind of parts which has bending, drawing, and punching operations inside the same piece.

It works very well for multistage tools, from 1 to 8 steps max.

It can be applied over the coil from one or both sides of the metal.

At 20% dilution (20% product - 80% water) can do parts from 0,5 to 2 mm thickness.

It can support many different kind of parts which has bending, drawing, and punching operations inside the same piece.

It works very well for multistage tools, from 1 to 15-20 steps max with a calibration process at the end very often.

It can be applied over the coil from one or both sides of the metal.

At 40% dilution can do parts from 2 to 10 mm thickness

SUMMARY:

PRODUCT IRMCO GEL 980 000 - 980 301 - 980 020 - 980 460 - 980 080 - Bending process

Those are the product for bending applications over tube and profiles

PRODUCT IRMCO FLUID 980 080 - 980 156UK - Stamping process ONLY

Those products are related to the stamping world. The 980 080 can be used in both fields.

The product 980 080 can NOT be used for galvanised or zincate material.

The product 980 156UK is perfect for galvanised or zincate material.