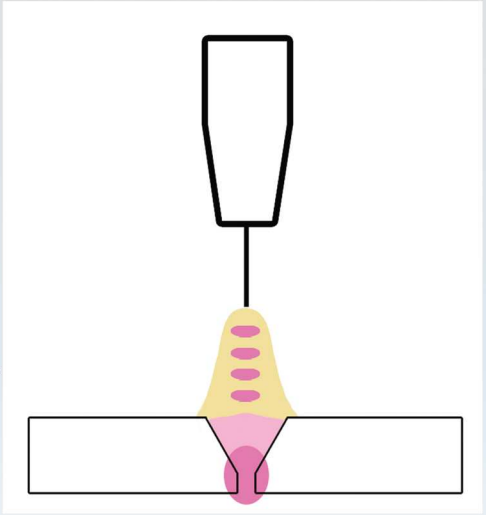
HyperPulse

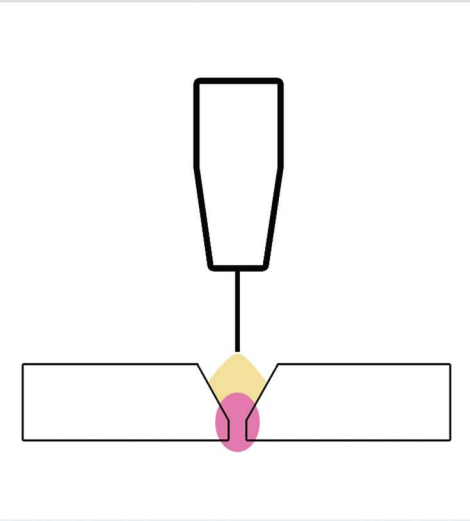
Up to 50 % faster



The key to higher speed is to increase the filler wire burn off performance. Until now, one pulse has always been one droplet. However, our process specialists found ways of enlarging this drop, thus permitting a controlled, almost constant metal flow into the weldpool. The leading droplet, which is pulsed, is always then followed by a second, controlled metal transition in spray arc form. This “gain” of material clearly shows its effect: more speed. 30 % faster with stainless steel and up to 48 % with steel. HyperPulse also makes the complete process colder. This is highly visible by the temper colours when welding stainless steel. It is possible to weld the required seam faster and with less distortion. The HyperPulse of the Hyper line proves itsability with high quality weld seam appearance and excellent fusion characteristics, which is also ideal for aluminium. Always giving best quality traditionallyassociated with pulse and remarkably easier to use for the operator.

HyperCold

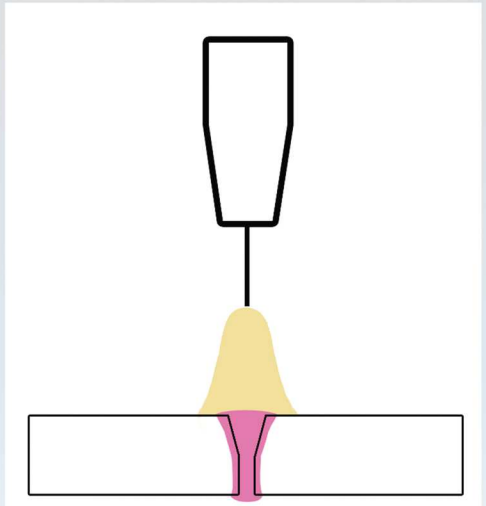
Top gap bridging and optimum weld pool control



When MIG/MAG was thought of for root welding, the short arc was previously thouhgt of to be the way to weld with as little energy as possible. Unfortunately, the current and voltage increase so quickly during the short circuiting in the process that the material is transfered almost explosively. The molten pool falls through or weld is pressed through thegap too strongly and irregularly. However if the energy is simply reduced, there is quickly the danger that the weld is no longer sufficiently formed. HyperCold applies here particularly: high end control technology ensures a “cold“ material transfer with an intended energy reduced short circuit resolution afterwards. The clear target: Not a grain of energy too much. Only exactly the level of current and voltage that guarantees the high process stability and ensures a perfect, slightly vaulted weld appearance. For maximum gap tolerance and gap bridging. Easy operation and perfect handling are the key to maximum productivity

HyperForce

Up to 35 % faster

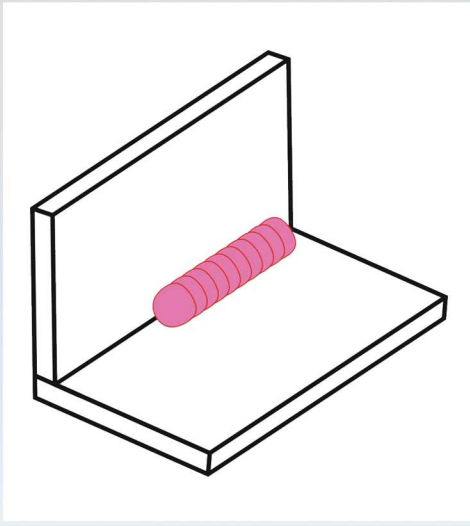


HyperForce : Up to 15 mm steel can be done in just one pass. Even 15 mm in just one layer become possible. For maximum MIG-MAG performance.

The HyperForce is considerably more focused.It has a much higher energy density thus reaching greater arcpressure into to the weld pool. The result is impressive as it makes MIG-MAG welding up to 35 % faster.The HyperForce is MIG-MAG-Maximum.
But not only its speed makes it more productive. There is also the fact that components which had to be welded in several passes before, can now - due to the MAHE® HyperForce - be joined in one single pass, up to 15 mm thick. The concentrated, stable arc of the HyperForce process can be managed perfectly, even with long wire stick-outs into narrow gaps. Also, penetration into the parent material is visibly better compared to ordinary MIG-MAG units. This is productivity that pays off; this is value added welding.

Double puls

TIG look



Ideally suited for jobs, where final look of visible weld with minimised rework is a target. TIG welding of aluminium or inox can be replaced in the furniture industry, bike and motorcycle frame welding or aviation areas.

For exact control of root access, weld overlapping and heat generation, MAHE® has integrated the "Double Pulse" as a standard feature. The pulse imposition means for you complete control over the droplet transfer phase and the process. Without manual intervention, more energy is generated during the droplet transfer phase, less energy in the cooling phase, and for every pulse only a droplet of filler metal. The endresult is a weld which is close to the quality of TIG.