GRIPPER JAWS

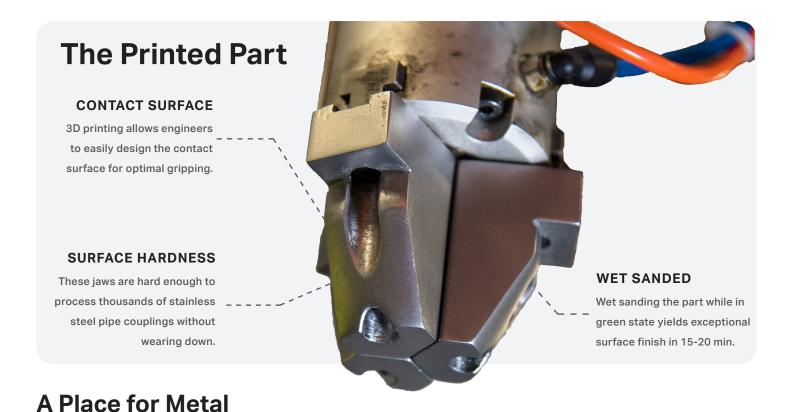


CRITICAL TOOLING — These jaws mount on a robotic arm that adds sealing rings to steel couplings.

THREAD GRIPPER — Each jaw clamps outward on the threaded inner surface of the coupling.

SURFACE HARDNESS — To withstand the abrasion of sharp threads, this part must be made of metal.

MASSIVE SAVINGS — Dixon Valve achieved 30x cost savings and 10x time savings by printing these jaws.



Dixon Valve has long used Markforged composite 3D printers to manufacture End of Arm Tooling (EOAT) for their many robotic arms. However, they could not print grippers that held abrasive surfaces. The threads these grippers hold quickly wear out printed composite parts, which while strong have the same surface hardness as thermoplastics. By printing the grippers with the Metal X, Dixon Valve achieves the

same advantages that 3D printing affords without sacrificing part durability.

	OLD PROCESS	MARKFORGED	SAVINGS
Fabrication Time	14 days	1.25 days	91%
Fabrication Cost	\$355	\$7	98%

