REPEATABLE BOLT-QUALITY HOLES

UltraSharp[®] Hole Cutting Technology



KEY FEATURES

When 1:1 holes are not enough, the industry's leading and patent-pending UltraSharp[®] hole cutting technology provides 3/4:1 bolt-holes in mild steel to eliminate the need for drilling. UltraSharp technology includes automatic configuration of the cutting parameters to achieve unmatched bolt-hole quality; eliminating the need for operator intervention. UltraSharp provides holes with superior cylindricity and repeatability through seamless integration of our Burny[®] controllers, Spirit[®] II plasma systems and Inova[®] torch height control.

- 3/4:1 bolt-holes in mild steel from 1/4 in. (6 mm) to 1 in. (25 mm)
- 1:1 bolt-holes in mild steel from 1/8 in. (3 mm) to 1 in. (25 mm)
- 1:1 bolt-holes in stainless steel for 3/16 in. (5 mm) and 1/4 in. (6 mm)
- No limitations for non-standard hole sizes and greater cutting amperage flexibility
- Superior cylindricity; no dings

Product Number» X44-32426-18



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BENEFITS

- Ease of use; automatically configures cut parameters to achieve the best bolt-hole quality
- No limitations for non-standard hole sizes
- Pre-determined lead-ins and lead-outs
- Feedrates for profiles based on hole diameter relative to plate thickness
- Greater cutting amperage flexibility in comparison to competitive hole cutting solutions
- Superior hole quality in terms of cylindricity; closing the gap between plasma cutting and laser cutting



ULTRASHARP[®] HOLE TECHNOLOGY – 1:1 HOLE



Without UltraSharp Hole (1/2 in. Mild Steel Plate)

 Poor cylindricity does not allow the bolt to pass through and will require a secondary operation such as drilling.



With UltraSharp Hole (1:1 Bolt-Hole, 1/2 in. Mild Steel Plate)

 Excellent cylindricity allows the bolt to pass through eliminate the need to drill



3/4:1 Holes using UltraSharp Technology 3/8 in. mild steel plate with 1/4 in. bolt-holes





ULTRASHARP 3/4 TO 1 RATIO SIZES (THICKNESS/AMPERAGE)

| | MATERIAL THICKNESS – IN. (MM) | | | | |
|----------|-------------------------------|---------------------|---------------------|---------------------|-------------------|
| AMPERAGE | 1/4 (6) Mild Steel | 3/8 (10) Mild Steel | 1/2 (12) Mild Steel | 3/4 (20) Mild Steel | 1 (25) Mild Steel |
| 70A | 3/16 (5) hole | | | | |
| 100A | | 1/4 (6) hole | | | |
| 150A | | | 3/8 (10) hole | | |
| 200A | | | | 1/2 (12) hole | |
| 200A | | | | | 3/4 (20) hole |



Comparison of Cyclindricity (in.) (0.394" holes, 3/8" mild steel plate)

PART NUMBERS

| | | Software Options |
|--|---------------|---|
| | X44-32426-185 | UltraNest™ Software |
| | X44-32426-18 | †UltraSharp™ Hole Technology with 3/4:1 MS and 1:1 SS |

† X44-32426-18 requires the purchase of X44-32426-185

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