

Laser Welding Model 1100 and Model 870 shotgun slide blocks

are currently being brazed to action bars or slide plates. The brazed joints are inherently unreliable and difficult to inspect without destructive testing. Scrap rates run as high as 20% in subsequent operations. A laser welding process was proposed to replace the troublesome brazing operation. The estimated gross savings are \$30M per year at a 38% ROI.

Metallurgically sound welds of the ~~M/1100~~ 1018 slide blocks were obtained by ETL. Welding tests of the ~~M/1100~~ powder metal slide blocks and the ~~8620~~ 8620 slide blocks are in progress.

Sample completion by ETL and subsequent functional testing at Ilion ~~was~~ delayed until 6/30/80 due to ~~EDT~~ laser startup problems and vacation schedules.

WAB

6/19/80

Laser Wood Carving

Laser wood carvings offer improved aesthetics over the current pressed checkering method of stock and fore end decorating. Laser carving is comparable in detail to the traditional and expensive hand carving methods but at greatly reduced cost.

Marketing expressed interest in a laser engraved DV emblem for the ~~47000~~ - LT-20 Ducks Unlimited Edition. Artwork is ready for review and ~~sample~~ ~~placement~~ with the vendor.

Other designs were prepared to further investigate laser decorating potential. Artwork ~~must~~ ^{will} ~~first~~ be discussed with the vendor before an order for samples can be placed.

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