

Material Processing Report

Report No. 9420
Date Received 8/2/2010

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Sales Contact Iyvind Hansen
Date Completed 8/4/2010

Customer Information

Company SYNRAD
Address 4600 Campus Place
Mukilteo, WA
98275 U.S.A.

Contact
Email
Phone (425)349-3500
Fax

Sample Description Black Acrylic Sheet (PMMA)

Customer Request Determine power needed to cut at 10 to 15 ipm

Results

Process: Cut

Material	Coating	Thickness	Power	Speed	Assist Gas	CycleTime	Comment
PMMA		0.16 in .	25 W	20 ipm	Air (5 psi)		Square Cut: Excellent edge quality
PMMA		0.16 in .	25 W	20 ipm	Air (5 psi)		Circle Cut: Excellent edge quality

Comments

The material cut very well with a resulting shiny polished edge. Only 25 W was needed to meet the required cut speed. Air was used at ~5 psi to shield the lens.

Environmental Consideration Fume extraction required
Fume extraction by FUMEX®

Duplicates Retained No
Confidentiality / NDA No
Applications Engineer Justin Conroy

SYNRAD

A Novanta Company

Applications Laboratory (MUK)

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Disclaimer: This report accurately represents processing parameters obtained with the samples provided to SYNRAD's Applications Lab. Your results may vary depending upon material consistency, optical setup, and your ability to accurately maintain the required laser processing tolerances in a production environment.

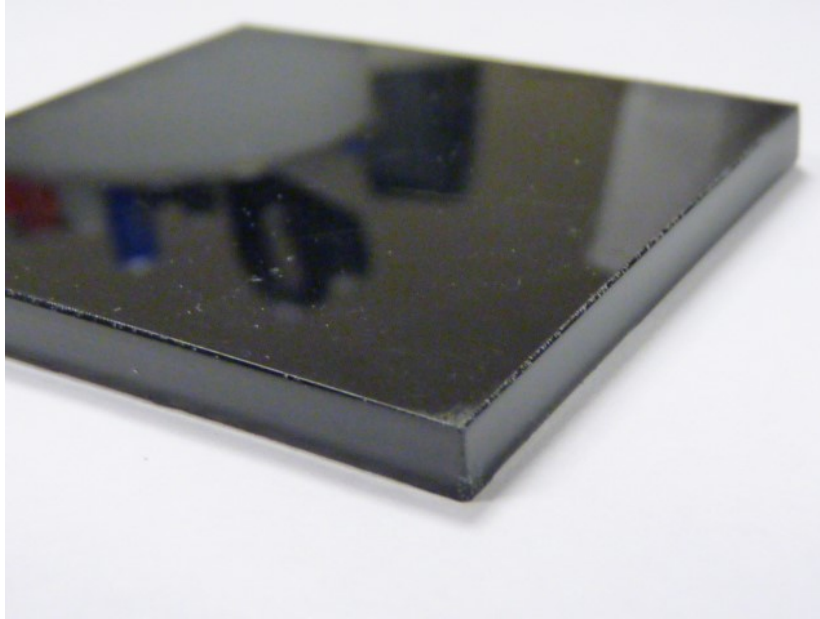
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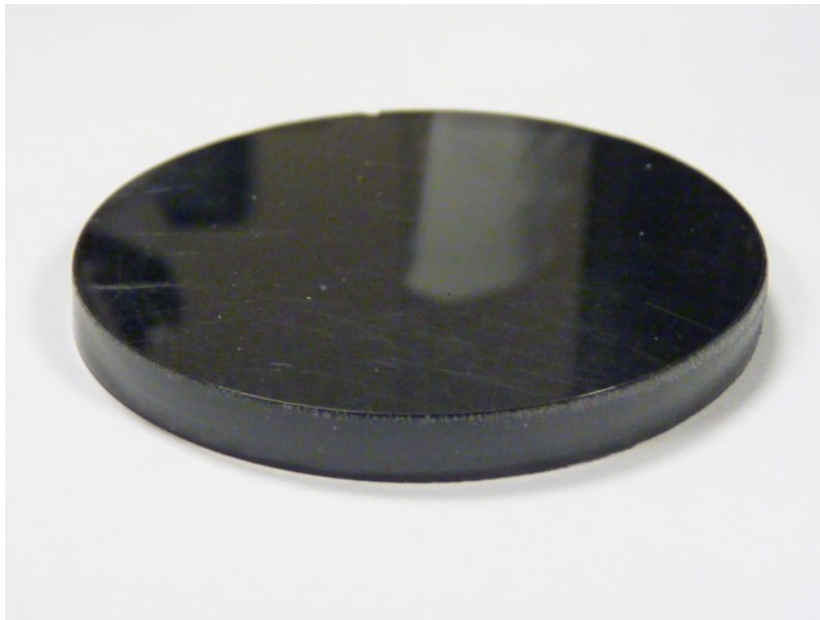
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Photo Analysis



A square cut done with 25 W at a speed of 20 ipm.

Photo Analysis



A circle cut done with 25 W at a speed of 20 ipm.

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