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## **OUR EQUIPMENT, PRODUCTS, PEOPLE:** SUPPORT YOU CAN COUNT ON!

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#### SECTION FOUR SHOTCRETE TRAINING

#### SHOTCRETE EQUIPMENT & NOZZLEMAN TRAINING

#### Shotcrete Nozzleman's & Equipment Training Course

## MULTICRETE

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## Shotcrete Equipment & Nozzleman Courses

"Hands-on" Training Seminars for Shotcrete Nozzlemen



Preparing the Test Panels for Shotcrete Spraying



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**Practicing Shooting** 

## Shotcrete Equipment & Nozzleman Courses

"Hands-on" Training Seminars for Shotcrete Nozzlemen



**Receiving Instruction and Demonstration from Course Instructor** 



 
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### Shotcrete Equipment & Nozzleman Courses

"Hands-on" Training Seminars for Shotcrete Nozzlemen



A Successfully Shot Test Panel

IN CANADA:

Thompson, MB: Tel: (204) 677-5977 Fax: (204) 677-5981 Flin Flon, MB: (204) 687-6533 (204) 687-6542

## Shotcrete Equipment & Nozzleman Training

Course completion is attained through successful demonstration of shotcrete knowledge and application skills of Shotcrete as a Nozzleman.

#### To obtain Graduation, the participant must:

- Score min 70% on written or verbal test on fundamentals.
- Demonstrate proper nozzling technique.
- Demonstrate proper potman and maintenance technique.

All participants will receive a copy of our Shotcrete Nozzleman/Potman Training Manual.

#### SHOTCRETE THEORY, APPLICATION AND QUALITY CONTROL

PHIL SEABROOK, Ph.D., P.E., P.ENG. -

Past Chairman, ACI 506 Shotcrete Committee

Mr. Seabrook has a 35-year career involvement in construction materials engineering. He started in manufacturing and product development, then moved into consulting. He has been active in the development of shotcrete since 1965. ACI 506 (Shotcreting) Member 1982 till present. Chairman 1987 to 1994. Currently Chairman of subcommittee on Fibre Re-inforced Shotcrete.



## Shotcrete Equipment & Nozzleman Courses

"Hands-on" Training Seminars for Shotcrete Nozzlemen

#### **GEOTECHNICAL & GROUND CONTROL TECHNIQUES USING SHOTCRETE**

DAVID WOOD, M. Sc., P.ENG

Independent Geotechnical Engineer based in Sudbury, ON

Formerly with Golder Assoc., Mr. Wood has been involved in major mining project design. Current projects include Hydraulic Fill Fence design for Placer Dome, rock support analysis for CP Rail and slope stabilization for Ontario Ministry of Highways.

#### EQUIPMENT AND MATERIALS

<u>GEORG NICKEL, P.ENG, (BC)</u> *Owner/President of Multicrete Systems Inc..,* The largest single source suppliers of Shotcrete/Grout equipment, materials and technical support in the western USA and Canada.

#### **'HANDS ON' TRAINING**

<u>IVAN "SHOTCRETE PETE" STEWART</u> *Owner/General Manager of shotcreting, grouting and concrete restoration company.* Also qualified instructor for shotcrete training on robotic equipment for the mining industry.

#### COURSE SCHEDULE

#### Day One

General Concrete and Shotcrete Theory, both Wet and 'Dry Mix'. Use of Shotcrete and Accessories as an Underground Support System Underground Shotcrete Applications and case histories. On-site Shotcrete Analysis and Discussion Re: troubleshooting, equipment and placement concerns. Day Two

Hands-on training in the application of shotcrete under the supervision of qualified instructor.

Analysis of shotcrete conveying equipment for purpose of maintenance and operating adjustments. Overview of Robotic Application Equipment.

#### Day Three

Nozzlemans' written or verbal test of Shotcrete Nozzleman techniques.

Test Panel Shoot.

Shotcrete Nozzling Technique Evaluation.

Equipment Maintenance and Operation Test.

All Team instructors have extensive practical experience to convey to participants.

The principal instructors who provide certification have comprehensive teaching experience as well a practical experience in appropriate industrial applications.

#### **COURSE DESCRIPTION:**

This is a practical hands-on course in the theory and proper application of shotcrete. Major emphasis is focused on the proper techniques of placing shotcrete for the purpose of underground support or underground construction. Training in maintenance and troubleshooting shotcrete equipment will also be provided.

The following Course Training Material is included:

Comprehensive Shotcrete Resource Binder

Shotcrete Nozzleman Training Manual

Lunches and coffee are included

**<u>Registration</u>**: Participants should register promptly as attendance is limited and on-site courses are presented on a limited, sequence basis.

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