

Research Report

Title of the Project: Investigation of improvement in service life of turbine material by thermal spray coatings to counter slurry erosion.

Name of Investigator: Er. KanwalpreetSahni

Name of Supervisor: Dr. Jasmaninder Singh Grewal(Prof. & Head Production Engg. Dept.)

Sanctioned Seed Grant No:For first phase (PE/C-32/490 dated 25/02/2021) ; Second phase (PE/514 dated 09/03/2021)

Amount Sanctioned: 45000/- (For first phase 10000/- and for second phase 35000/-)

Availed Amount: 28768/- (For first phase 9888/- and for second phase 18880/-)

Status of Project: The following work has been completed till date under seed grant:

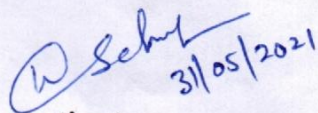
- Completed the modification of Slurry erosion test rig.
- Procurement of coating powder and deposition of the same on steel samples.

Benefits of Research:

1. Slurry Erosion Test Rig modified by me will help in erosion wear testing of different metals at different impingement angles and standoff distances. The test rig is capable to evaluate slurry erosion done by slurries of various compositions.
2. The slurry erosion testing of thermal spray coated samples, done on above mentioned test rig is helpful to understanding and comparing slurry erosion resistance of the thermal coated samples.


Supervisor:

Dr. Jasmaninder Singh Grewal


Investigator:

Er. KanwalpreetSahni