IGGA
International Grooving & Grinding Association
Your Pavement Preservation Resource® since 1972

quick facts: safety grooving

Grooving Runways Reduces Hydroplaning

WATER, SLUSH, OR WET SNOW ON A RUNWAY SURFACE can cause aircraft to skid upon landing. Transverse grooving on runways is a solution recommended by the Federal Aviation Administration (FAA) and countless other aviation authorities around the globe. Pilots have observed that grooved surfaces drastically reduce all types of skids on wet or flooded runways and provide positive nose-wheel steering during landing roll-out. They further note that the overall airplane ground handling and stopping characteristics on grooved surfaces are better than they are on other surfaces.

Runway grooving is a time-and cost-effective way to rehabilitate older runways that are showing loss of friction. Only structurally-sound pavements should be grooved.

The Process:

Diamond saw blades can be used to create grooves in both portland cement concrete (PCC) pavement and hot mix asphalt pavement. Grooves run transversely across the pavement slab and measure approximately ¼ inch by 1/4 inch (6 mm x 6 mm) width and depth and are spaced 1-1/2 inch (40 mm) center to center.

No matter what the weather, all fixed-wing aircraft require precise, skid-free landings — every time. Even when wet and flooded, runways and taxiways must deliver the best possible overall ground handling and stopping characteristics that today's state-of-the-art technology can provide. A saw-cut transverse-grooved landing surface will ensure that the aircraft will have a safe, uneventful landing despite the weather.

ADVANTAGES OF GROOVING:

- Easy to construct
- Economical
- Can be used in targeted areas, eliminating the need for extensive shut-downs
- Easy to perform during off-peak hours
- Increases traction
- Reduces hydroplaning and minimizes skids
- No adverse effect on pavement fatigue life
- Airplanes report reduced stopping distances

Runway Grooving is:

SIMPLE

SAFE

ECONOMICAL

For more information on safety grooving, **click here.** For complete information on CPP, visit **igga.net.**