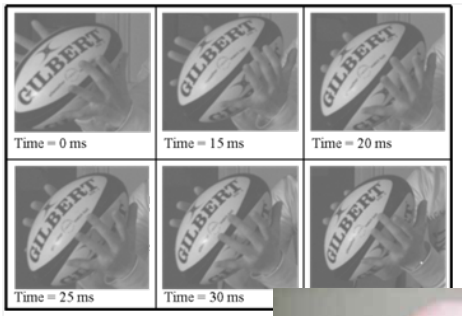
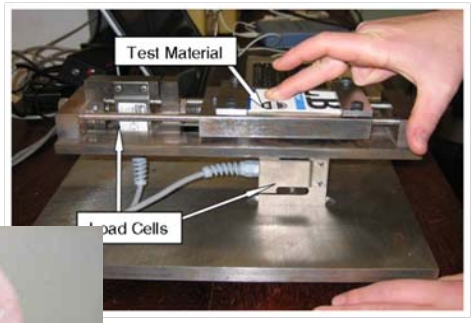
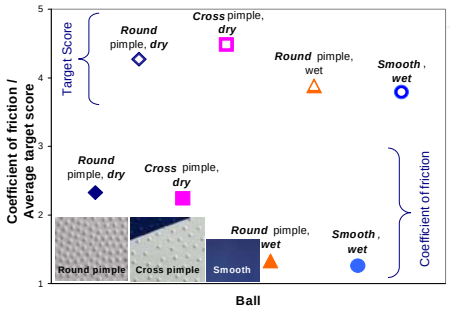
Finger Friction and Grip

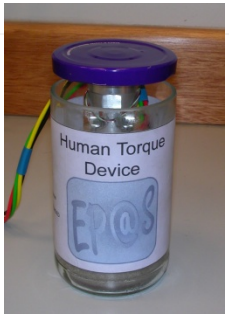
Aims of the Work

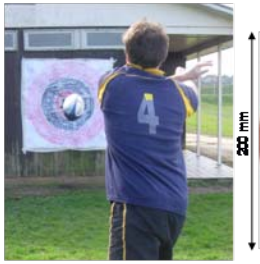
- Understand the fundamentals of finger friction
- Quantify affects of force, contact area, moisture, surface texture etc.
- Develop models for finger friction
- Apply data to grip problems – jam jar opening; rugby ball grip

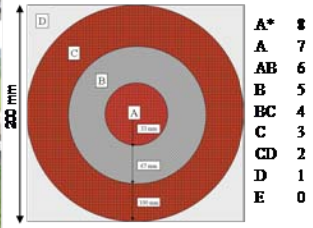












Conclusions/Outputs

- Relationship derived for friction and load
- Effect of moisture characterised
- Models developed for moisture and different levels of surface texture
- Data used in jar opening torque predictions – compared well with actual torques
- Rugby ball friction correlated with accuracy of passing