

DIGITAL CONTENTS

SUBJECT: MED

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Designation-Lecturer

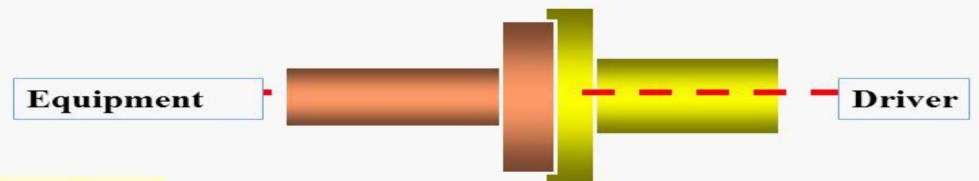
Deptt.-Mechanical Engg.

Govt. Polytechnic, Dhamlawas

COUPLINGS

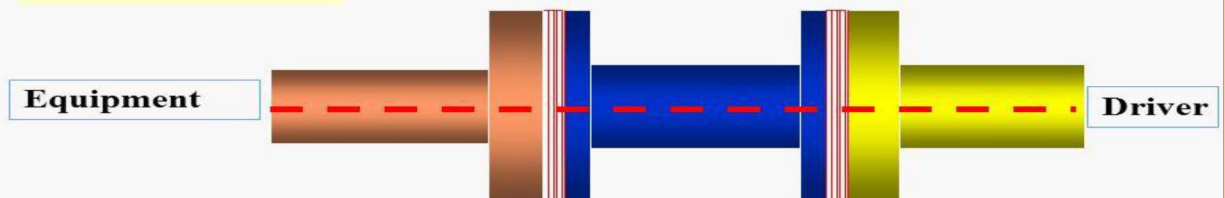
- Couplings are mechanical elements that ‘couples’ two drive elements (shafts) which enables motion to be transferred from one element to another.
- Shaft couplings are divided into two main groups.
 - 1) Rigid coupling-: It is used to connect two shafts which are perfectly aligned.
 - 2) Flexible coupling Flexible couplings are used to transmit torque from one shaft to another when the two shafts having both lateral and angular misalignment

1 -Rigid Couplings



2 -Flexible Couplings

*Spacer with shims



CLASSIFICATION OF COUPLINGS

RIGID COUPLING

- Sleeve or Muff Coupling
- Clamp Coupling
- Flange Coupling

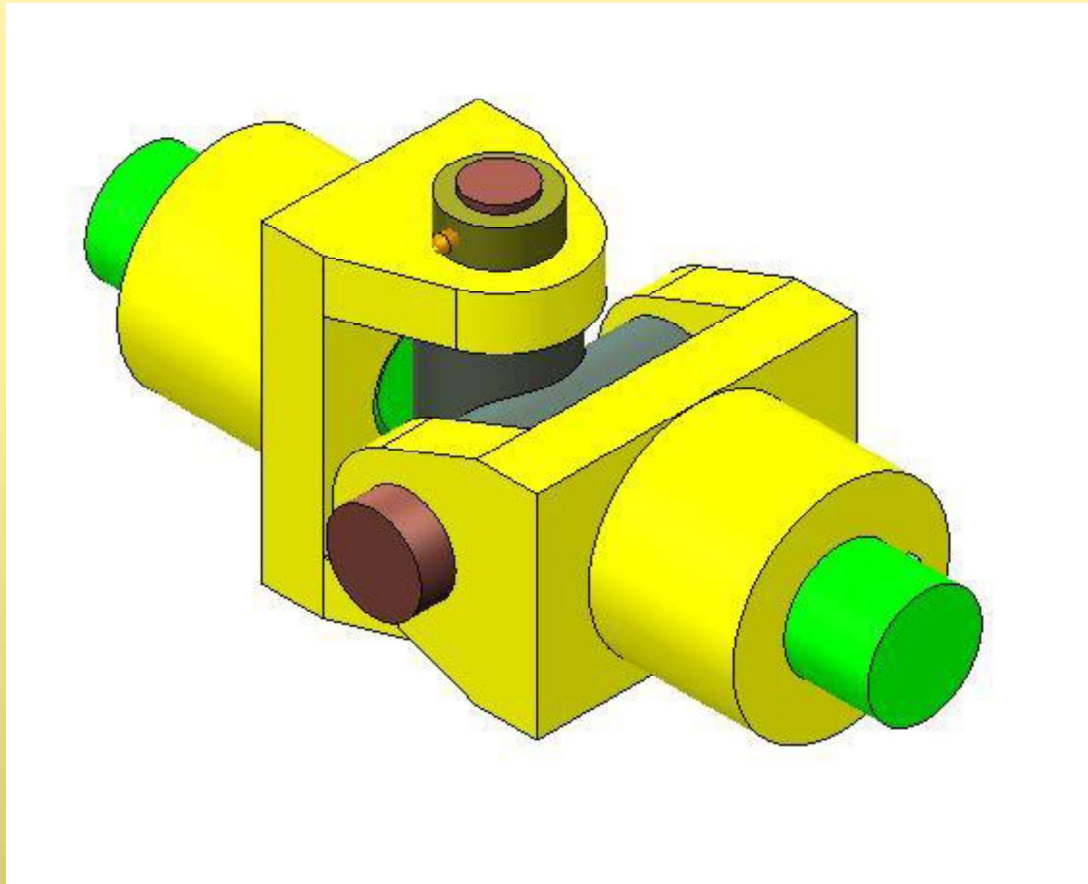
FLEXIBLE COUPLING

- Universal Coupling
- Oldham's Coupling
- Bushed Pin Type Coupling

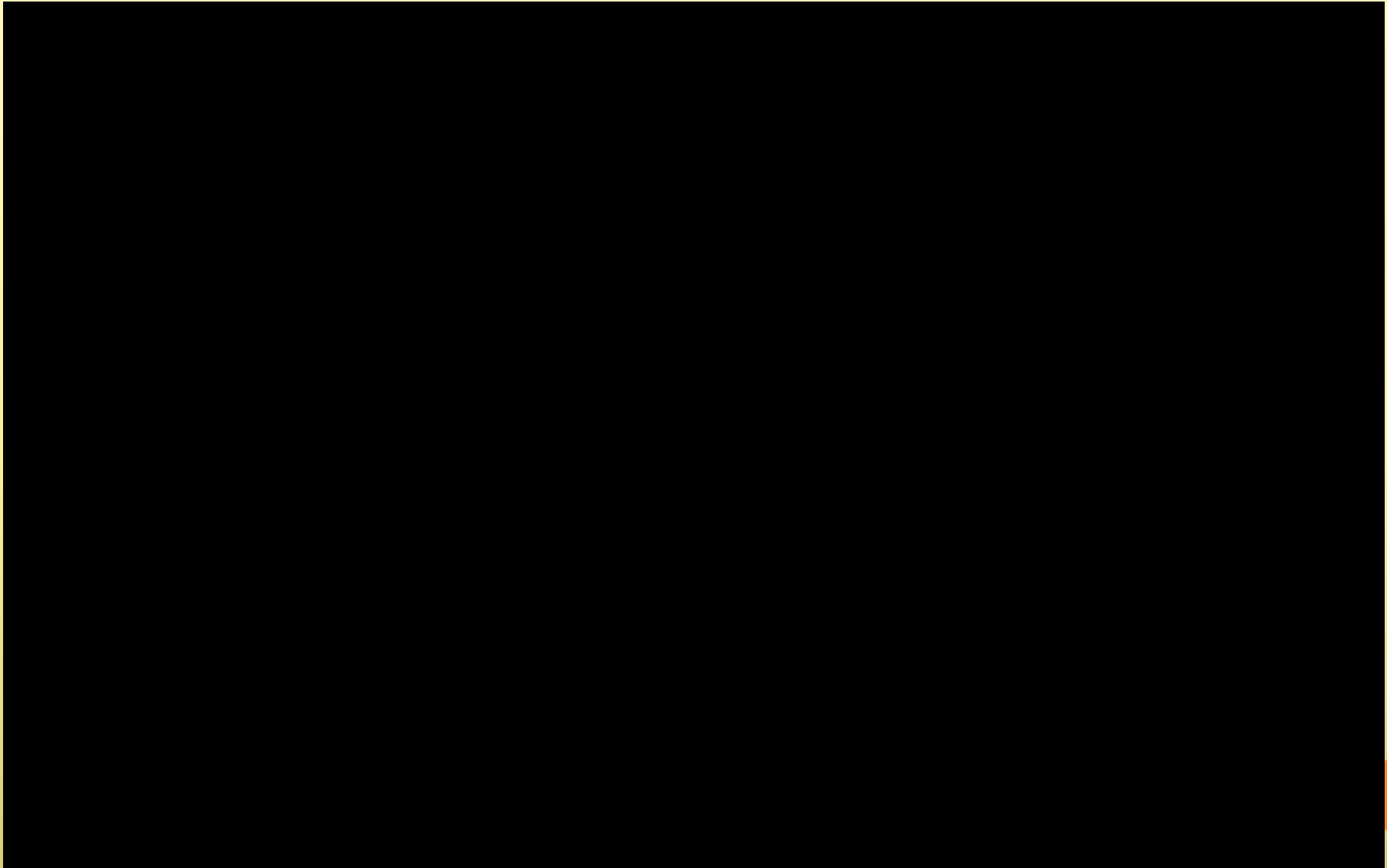


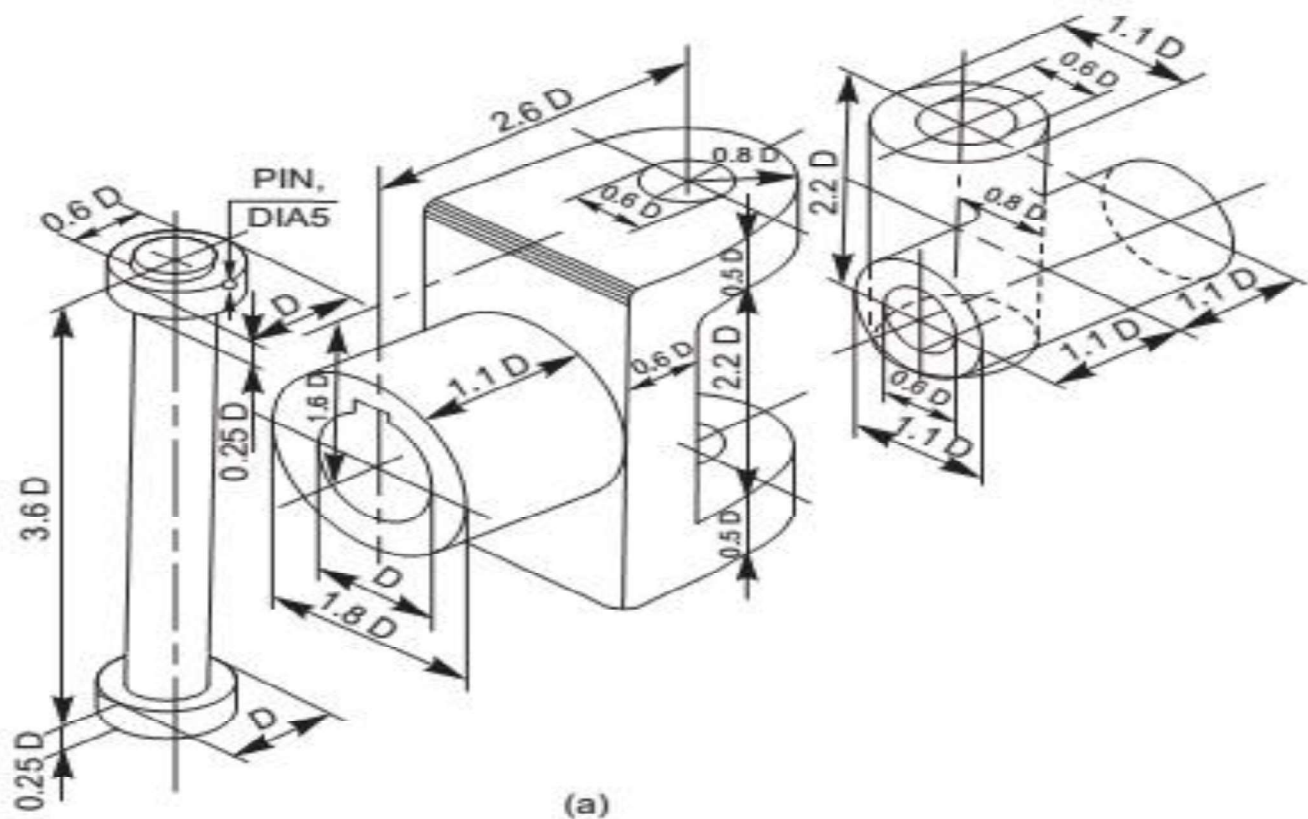
UNIVERSAL COUPLING

- A universal coupling, universal joint, U-joint or Hooke's joint is a joint or coupling in a rigid rod that allows the rod to 'bend' in any direction, and is commonly used in shafts that transmit rotary motion.

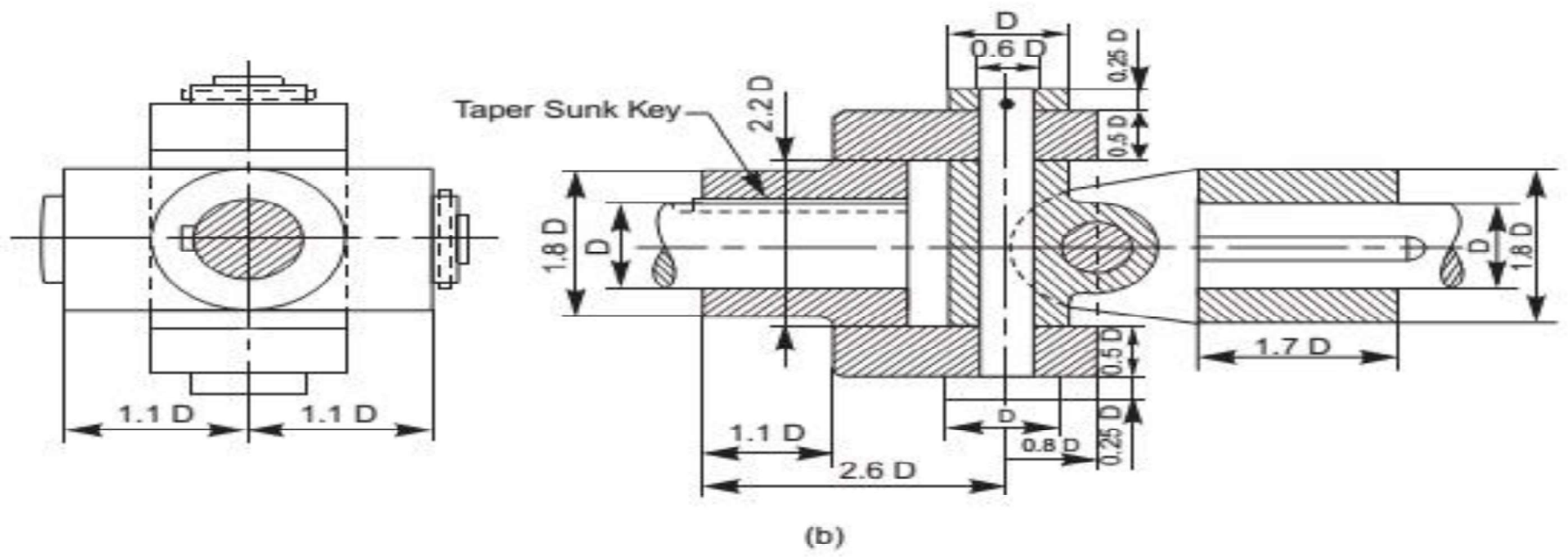


ASSEMBLY OF UNIVERSAL COUPLING





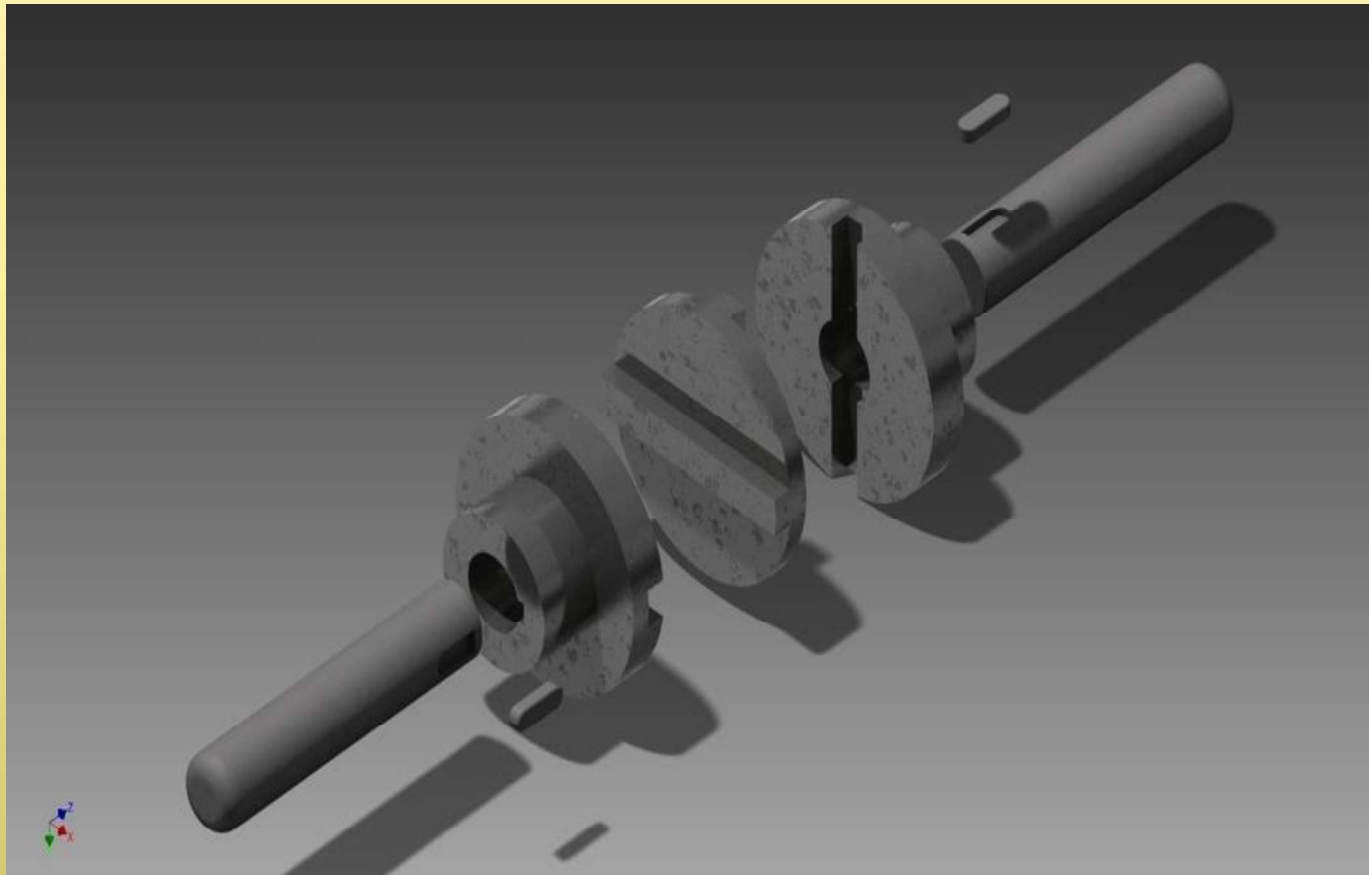
(a)



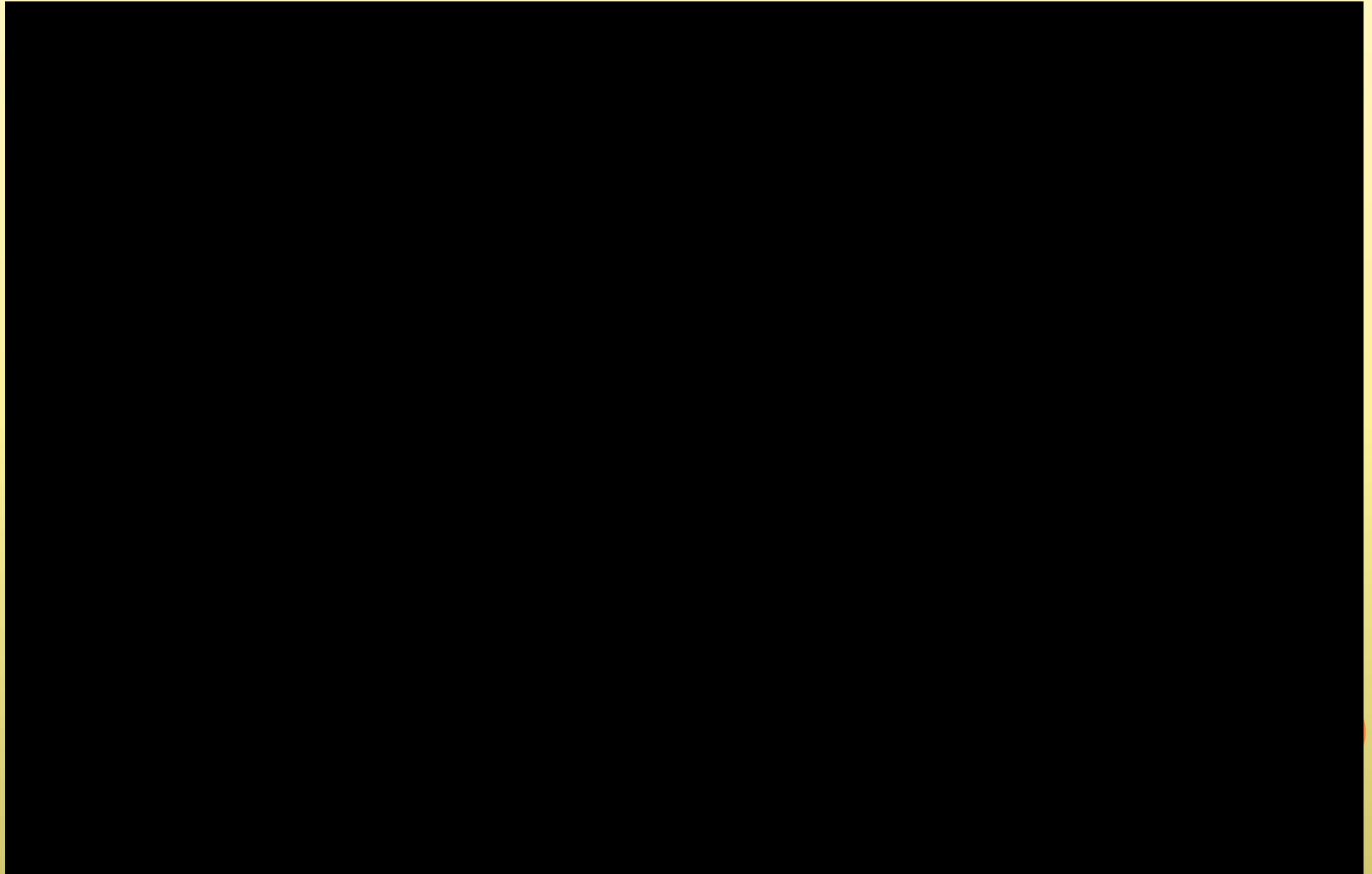
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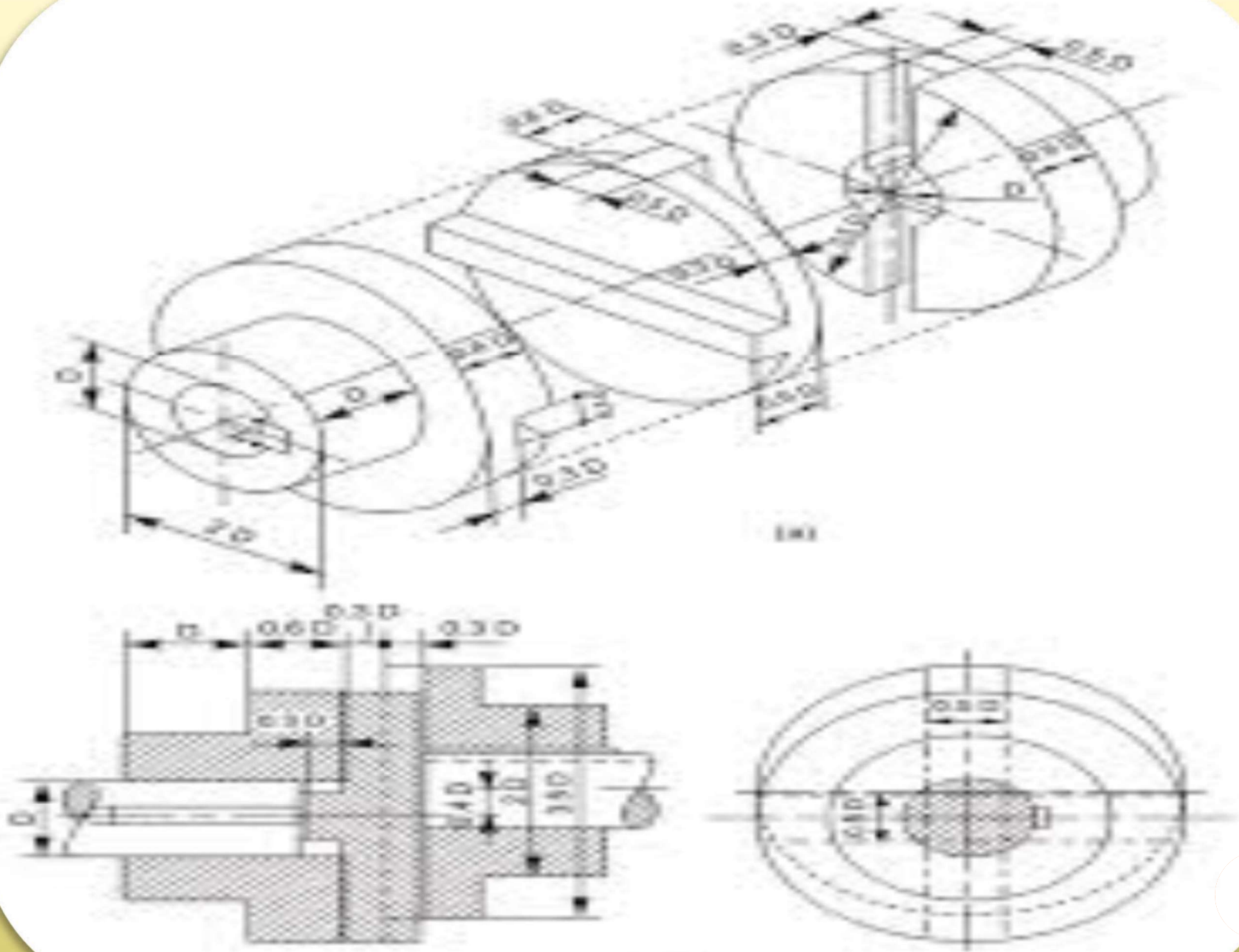
OLDHAM'S COUPLING

- An Oldham coupling has three discs, one coupled to the input, one coupled to the output, and a middle disc that is joined to the first two by tongue and groove.



ASSEMBLY OF OLDHAM'S COUPLING





BEARINGS

- A bearing is a machine element that constrains relative motion to only the desired motion, and reduces friction between moving parts.



BEARINGS CLASSIFICATION

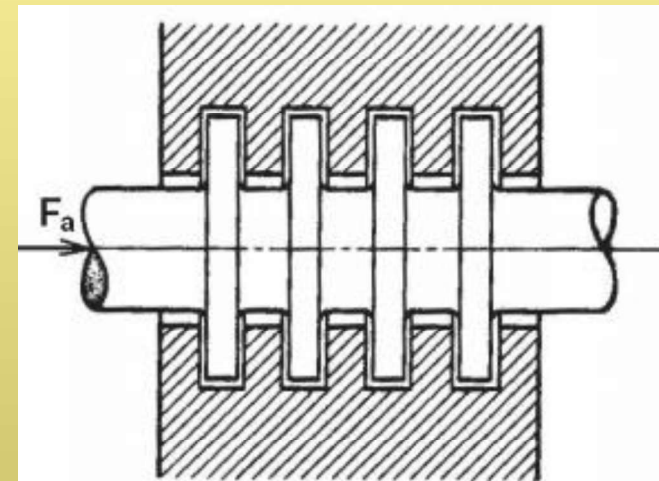
JOURNAL
BEARINGS



FOOT-STEP
BEARINGS

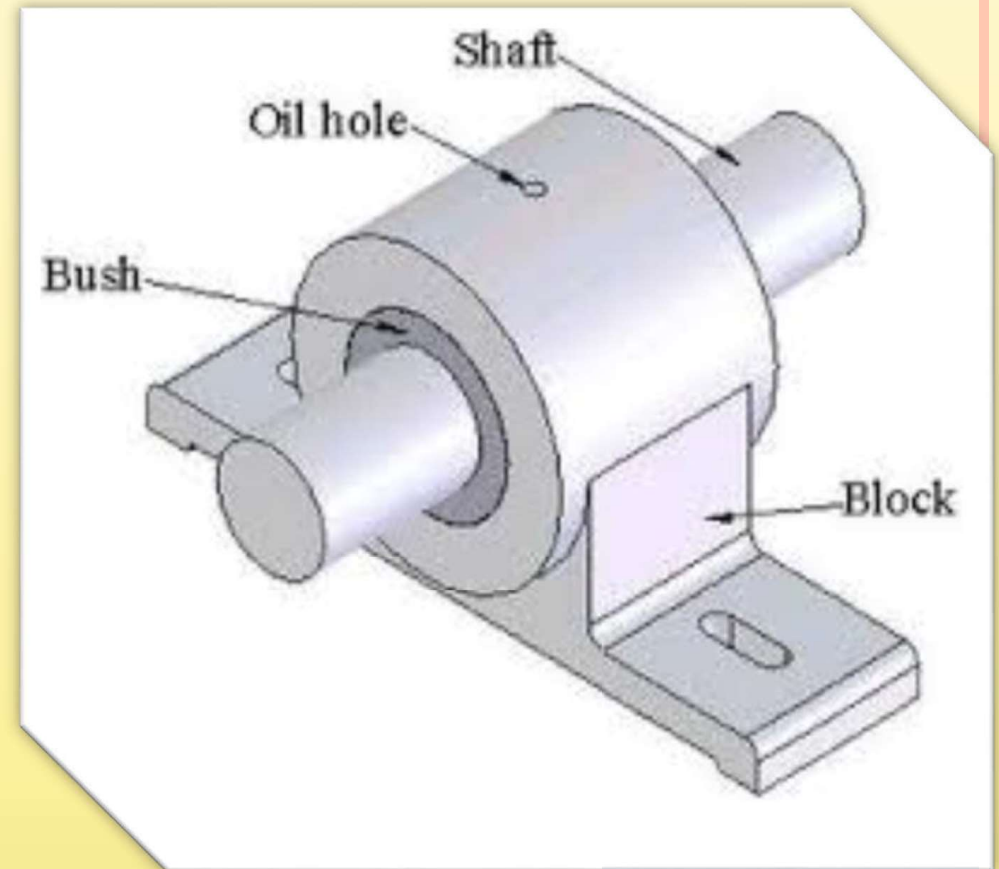


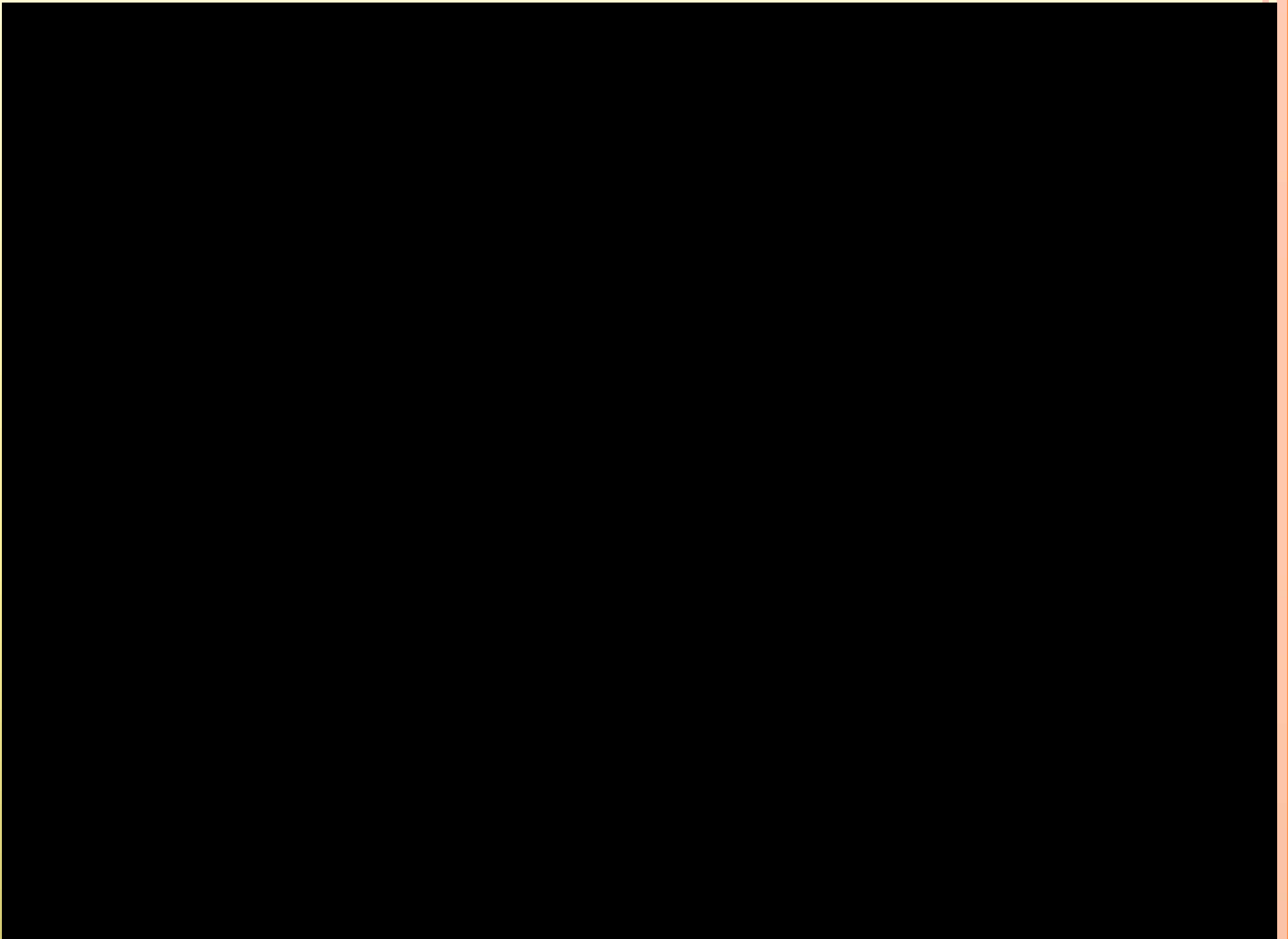
COLLAR (THRUST)
BEARINGS



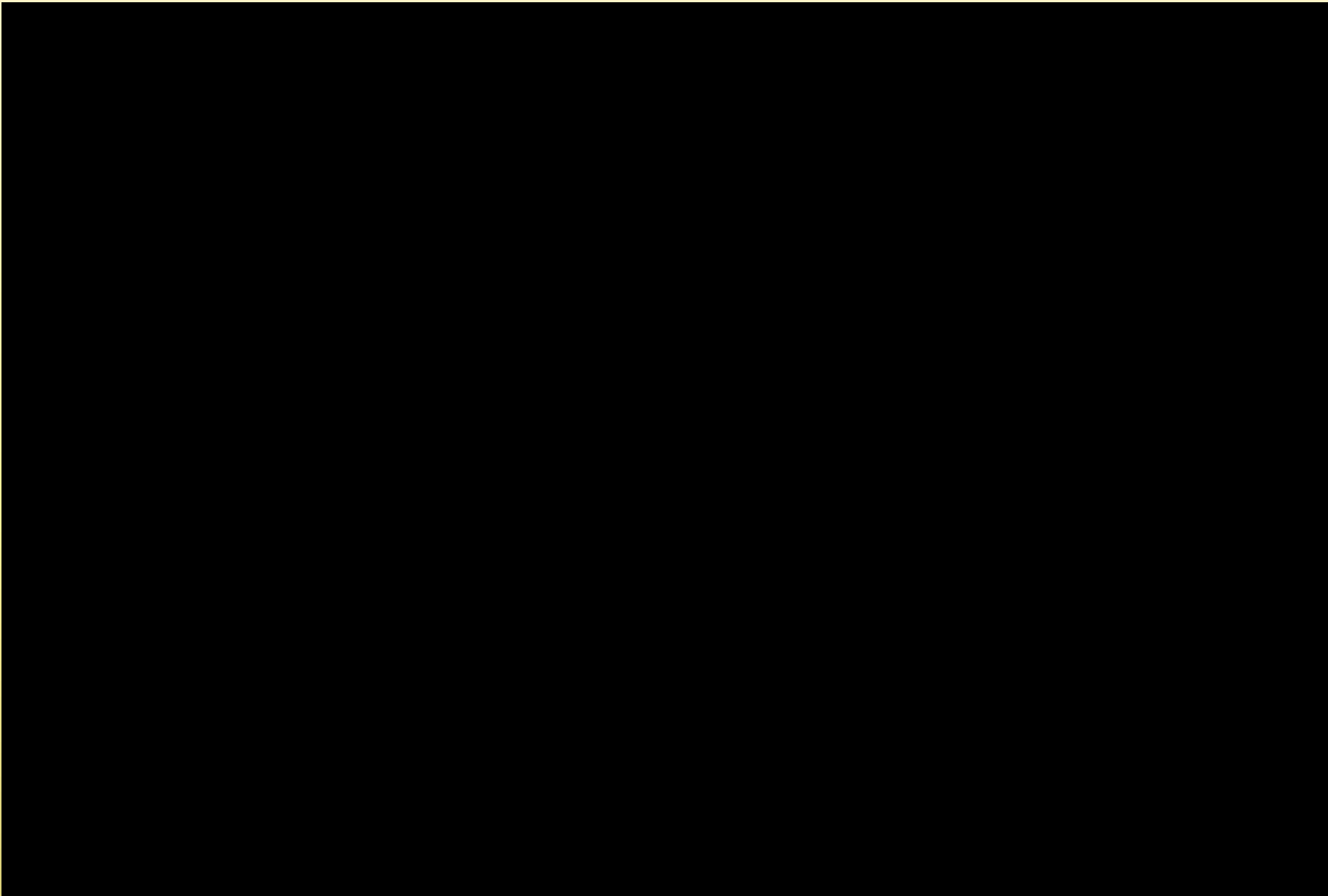
BUSH BEARINGS

An independent plain bearing that is inserted into a housing to provide a bearing surface for rotary applications; this is the most common form of a plain bearing.





PLUMMER BLOCK



BALL BEARINGS

